

WORKSHOP
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Calpine Corporation's)
Petition to Amend the) Docket No. 98-AFC-1
Commission Decision for)
the Los Medanos Energy)
Center Project)
-----)

PITTSBURG CIVIC CENTER
CITY COUNCIL CHAMBERS
65 CIVIC AVENUE
PITTSBURG, CALIFORNIA

THURSDAY, NOVEMBER 30, 2000
7:00 P. M.

Reported by:
James Ramos
Contract No. 150-99-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

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1 P R O C E E D I N G S

2 COMPLIANCE PROJECT MANAGER SCOTT: Good
3 evening, my name is Jeri Scott. I am the
4 California Energy Commission's Compliance Project
5 Manager for the Los Medanos Project.

6 We are here tonight to discuss the
7 petition submitted to the California Energy
8 Commission by the Calpine Corporation. Before we
9 get started I would like to introduce the panel
10 tonight and then I would like to tell you a little
11 bit about the California Energy Commission's
12 amendment process.

13 As I stated, my name is Jeri Scott. I
14 am the Compliance Project Manager.

15 ENVIRONMENTAL PROTECTION OFFICER RINGER:
16 My name is Mike Ringer. I did public health for
17 the Energy Commission.

18 SENIOR MECHANICAL ENGINEER BAKER: Steve
19 Baker. I looked at efficiency and power
20 generating capacity.

21 SENIOR STAFF COUNSEL MUNDSTOCK: David
22 Mundstock. I am the attorney for the Commission
23 staff on compliance matters.

24 MR. RUBENSTEIN: Gary Rubenstein with
25 Sierra Research. We are air quality consultants

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1 for Calpine Corporation.

2 MR. SOMMER: Mike Sommer with Calpine.
3 I'm the Project Manager for the Los Medanos Energy
4 Center.

5 MR. FRANCO: Guido Franco, California
6 Energy Commission, air quality.

7 COMPLIANCE PROGRAM MANAGER NAJARIAN:
8 I'm Chuck Najarian. I'm the Compliance Program
9 Manager with the Commission.

10 COMPLIANCE PROJECT MANAGER SCOTT: Thank
11 you.

12 Once a project has been certified by the
13 California Energy Commission any changes made to
14 those conditions contained within the decision
15 must be analyzed by the staff and presented to the
16 Commissioners at a regularly scheduled Business
17 Meeting, before any changes can be made to any
18 language in the conditions.

19 Calpine, as I stated, submitted a
20 petition, staff analyzed the petition and
21 determined that it met the criteria of our
22 Regulation 1769 and we proceeded to process the
23 petition.

24 What we're doing now and the purpose of
25 this workshop this evening is to allow Calpine to

1 present their petition to you and to have our
2 staff give you a summary of their analysis and to
3 answer any questions you may have.

4 Now what will happen is you've already,
5 many of you are on the Energy Commission's mailing
6 list and you've received a copy of the staff's
7 analysis. You have until December 15th to comment
8 on that analysis or anything in the petition.

9 We have scheduled a goal to have this
10 before the Commission on December 20th. So,
11 that's how the process works. And we're here to
12 get public input and to allow you to participate
13 in the Energy Commission's process.

14 So, without further ado -- and we have
15 agendas up here if you need an agenda.

16 Let's start with a description of the
17 amendment petition and Calpine will present that
18 to us. Do you have any questions about the
19 process, about what will happen?

20 MR. MacDONALD: James MacDonald. I'm
21 representing Care. I'm also a resident of
22 Pittsburgh.

23 On your agenda you don't state -- just
24 public participation. Is that going to be an
25 ongoing or when do I have the opportunity to

1 address issues?

2 COMPLIANCE PROJECT MANAGER SCOTT:

3 Public participation has been ongoing ever
4 since --

5 MR. MacDONALD: No, I mean during this
6 -- is it going -- is my participation going to be
7 ongoing throughout this meeting tonight or are you
8 going to have public input at the end of the
9 meeting? I mean it doesn't exactly specify when.

10 COMPLIANCE PROJECT MANAGER SCOTT: Oh,
11 okay, I understand what you're saying. Okay, what
12 I had in mind is that after each item that it
13 would be open for questions and discussion at that
14 time, so it's ongoing participation.

15 MR. MacDONALD: Thank you.

16 MR. SOMMER: Jeri, there's seven
17 components here. Would you like to stop after
18 each for questions or do we want to go through all
19 of them? I plan to briefly describe each
20 component of the amendment. Either way is fine
21 with me.

22 COMPLIANCE PROJECT MANAGER SCOTT: I
23 think it may be easier if we stopped after each
24 component and allow any of the members of the
25 audience to ask questions at that time.

1 MR. SOMMER: Okay, very good.

2 Originally there were seven components
3 to the amendment. The first one is a transfer in
4 ownership of the project. That was regarding the
5 legal entity that was going to own the project and
6 that request was subsequently withdrawn. We, for
7 various reasons, decided to leave the company
8 entity that owns the project as is. There's
9 obviously no -- it's still Calpine that owns it,
10 but there's a company that Calpine owns, PDEF,
11 which actually owns the project.

12 So there's obviously no environmental
13 impacts there. There's no other parties involved
14 other than Calpine. It's more just a legal entity
15 type issue.

16 The next item was the combustion turbine
17 fuel consumption limit increase which is related
18 quite closely with the third item, so we could
19 maybe throw that one in as well, the duct burner
20 size in the heat recovery steam generator.

21 The combustion turbine is the prime
22 mover of the project. It's where the majority of
23 the fuel is combusted on the project. It exhausts
24 to a heat recovery steam generator which uses that
25 exhaust heat to generate steam to drive a steam

1 turbine to generate additional power.

2 The combustion turbine in the original
3 permit, the fuel limits were based on annual
4 average temperatures only. Annual average being
5 around 60 degrees, 60 to 64 degrees.

6 In order to allow this plant to operate
7 year round under all conditions, we determined
8 that we should look at the fuel consumption on a
9 low ambient temperature day, as low as 40 degrees.
10 The characteristics of a combustion turbine are
11 that they are a mass flow machine. The denser the
12 air is -- which, the colder it is the denser it
13 will be, therefore the more mass can pass through
14 the gas turbine and the more power it can
15 generate.

16 The more mass that can pass through it,
17 the more fuel it consumes. So in order to allow
18 year round operation without limiting our ability
19 to generate, we requested to increase the limit of
20 consumption of fuel in the combustion turbine.

21 Before I go on are there any specific
22 questions related to that portion?

23 I guess to kind of go on as to what will
24 happen after I'm done speaking, Gary Rubenstein
25 with Sierra Research will address more

1 specifically some of the emissions and air quality
2 type issues related to each of these changes. I'm
3 trying to address more some of the technical
4 reasons why we are requesting these changes.

5 MR. LENGYEL: Mike Lengyel from
6 Pittsburgh. It says the duct burner rating will go
7 from 83 MN BTU per hour to 333 MN BTU per hour.
8 Now that's kind of a four-fold increase when
9 you're asking for a very -- less than 27 megawatts
10 increase. How come that's a four-fold increase in
11 that rating if you're not planning some further
12 expansion of this facility beyond what's stated at
13 present?

14 MR. SOMMER: Okay, that's the next item
15 is the duct burner size and I'll walk through that
16 and see if I can answer your question.

17 The equipment on this project, the steam
18 turbine, its ability to generate is based on the
19 energy that's available from the exhaust of the
20 combustion turbine. Therefore, as I was saying
21 earlier, this is a mass-blow machine. On a cold
22 day you pass through more mass of air, therefore
23 there's more mass going to -- your heat recovery
24 steam generator produces more steam for your steam
25 turbine.

1 Likewise, on a hot day, in the
2 summertime on a 90 degree day, the output of your
3 combustion turbine drops significantly. The
4 exhaust heat available to generate steam drops
5 significantly. So what we can do is inject
6 additional fuel into the exhaust stream from the
7 combustion turbine, add more heat to the heat
8 recovery steam generator to generate and sort of
9 make up for the lost generation, because the --
10 you know what happens on a hot day.

11 So that allows us to fully utilize the
12 steam turbine capability that's already there
13 that, on a cold day, may be fully utilized just
14 because there's more mass flow and more heat in
15 the exhaust compared to a hot day.

16 So the difference in the originally
17 permitted duct burner size and the current duct
18 burner size is the amount of available capability
19 in the steam turbine on a hot summer day. On a
20 40-degree day at our maximum output we will not be
21 able to burn the full 333 million BTUs in the duct
22 burner. We'll only be able to burn about 115 or
23 so one million BTUs, I forget the exact number,
24 before we reach the limits of our steam turbine's
25 capability.

1 So only on a hot day, say 90-degree day,
2 will we be able to actually utilize the full size
3 of that duct burner increase that we're requesting
4 here.

5 Does that make sense?

6 MR. LENGYEL: What I'm confused about is
7 whether you're like planning another expansion
8 later on. You're making this four times bigger
9 than what it is. Does that imply that you're
10 going to --

11 MR. SOMMER: No, it does not. This duct
12 burner will be associated with the final
13 installation of the heat recovery steam generator
14 that we are building right now and the steam
15 turbine that we're building right now. And it
16 will allow us to fully utilize that equipment on a
17 hot day when the performance is degraded. But,
18 no, the heat from that duct burner cannot be used
19 on any additional equipment that might be
20 installed.

21 COMPLIANCE PROJECT MANAGER SCOTT: Just,
22 Mike, before you continue. Once again, may I
23 encourage you to please come up, because we want
24 to keep a record of all your concerns and your
25 questions. Thank you.

1 MS. LAGANA: Paulette Lagana with CAP-IT
2 here in Pittsburgh.

3 So the increase that you're asking for,
4 which is the increase in the duct burner and the
5 increase in the turbine and the duct burner fuel
6 -- I mean, sorry, the heat recovery system
7 generator duct, right?

8 MR. SOMMER: Heat recovery steam
9 generator duct burner.

10 MS. LAGANA: Why would this be
11 necessary?

12 MR. SOMMER: It's necessary to allow us
13 to fully utilize the equipment that is provided on
14 the project. It's necessary to allow us to fully
15 utilize that equipment when generation is needed,
16 which is, in California, it's during high ambient
17 temperatures where our plant performance is
18 degraded the most because the generation from a
19 combustion turbine is less on a hot day. So we
20 can come back up to and exceed our original design
21 with this duct burner size increase.

22 MS. LAGANA: Okay, but the question is,
23 maybe deeper into the question should be, was not
24 this plant permitted with this capacity built into
25 it?

1 MR. RUBENSTEIN: The plant was
2 permitted, but based on Calpine's engineering
3 review of the plant after they took it over they
4 concluded that not all of the different pieces
5 were designed to work together to optimize the
6 output of the plant.

7 MS. LAGANA: Is that normal?

8 MR. RUBENSTEIN: That they're not fully
9 optimized?

10 MS. LAGANA: Uh-huh.

11 MR. RUBENSTEIN: I guess it would depend
12 on the developer, not in my experience with
13 Calpine, no. Usually they are fully optimized
14 before you go into the licensing process.

15 MR. SOMMER: Well, it can be a matter of
16 the developer's pocketbook. It costs money to put
17 this equipment in. Some plants have duct burners,
18 some don't. Some have something called steam
19 injection, some don't, and some developers choose
20 to put them in, some don't.

21 And, again, as Gary said, when we took
22 over the plant we saw that we could utilize the
23 equipment that was already there to increase the
24 output and that's the basis of our amendment.

25 MS. LAGANA: Wasn't Calpine, an

1 intervenor during the Enron process, as I recall,
2 the Enron process for this plant?

3 MR. RUBENSTEIN: I think they might have
4 been, but I'm not certain.

5 MS. LAGANA: They were.

6 MR. SOMMER: Were we an intervenor,
7 Brian?

8 MS. LAGANA: Yes, you were.

9 MR. BERTACCHI: Yeah, I'm Brian
10 Bertacchi from Calpine. Calpine was an intervenor
11 in the process, but we didn't have the engineering
12 details. We weren't an owner of the project. We
13 didn't have the engineering details that, for
14 instance, they had as they were procuring
15 equipment and doing design changes.

16 MS. LAGANA: But the California Energy
17 Commission did. They couldn't hide something like
18 that from the California Energy Commission,
19 because this Commission had to approve that
20 project based on all available information. Are
21 you telling me that Enron withheld information
22 from the California Energy Commission?

23 MR. SOMMER: No, but I don't believe
24 that the Energy Commission or even Enron had the
25 detailed equipment specs prepared at the time of

1 licensing.

2 MS. LAGANA: You mean you approved
3 something without knowing all the information?

4 COMPLIANCE PROJECT MANAGER SCOTT: When
5 an AFC comes in we get a conceptual layout of the
6 project and the setup, and we don't expect the
7 project owner to have all of the details when they
8 come in. That is taken into consideration in our
9 analysis. But, no, not the exclusive detail that
10 I think that you're referring to.

11 SENIOR STAFF COUNSEL MUNDSTOCK: Let me
12 try to differentiate. When it comes to the
13 environmental impacts for a project we are
14 responsible for analyzing those. We should not
15 miss anything having to do with the environmental
16 impacts.

17 MS. LAGANA: Right.

18 SENIOR STAFF COUNSEL MUNDSTOCK: And if
19 we'd done our job correctly, we didn't miss
20 anything. When it comes to the technical
21 engineering details and final engineering design,
22 that is not something that the Energy Commission
23 has before it.

24 MS. LAGANA: But the Energy Commission
25 needs to make their decision based on capacity.

1 SENIOR STAFF COUNSEL MUNDSTOCK: No,
2 actually, you'll hear from an engineer why that is
3 not the case. But what counts are the impacts and
4 you have a decision with conditions of
5 certification and strict limitations on the
6 environmental impacts. And so we believe we did
7 our job correctly on that.

8 What they're talking about is trying to
9 improve the engineering, the final engineering
10 design of the project and make it better from a
11 technical perspective. And so what they propose
12 -- some of it does have an environmental impact
13 and that has to be analyzed. Other things don't,
14 and so we have to differentiate between those, but
15 the truth is that on any power plant, final
16 engineering design is not something that is
17 presented to the Energy Commission during the
18 licensing phase because an applicant only does it
19 after the project is licensed.

20 And they, because it was a different
21 applicant, because Calpine took over from Enron,
22 Calpine thinks they're improving on Enron's design
23 and that's part of the basis of the amendment
24 before you. They think they're making the project
25 better.

1 MS. LAGANA: It just seems from your
2 wording that you're making the project bigger. It
3 may be better, but it's also going to be bigger.

4 MR. RUBENSTEIN: It's going to be bigger
5 in terms of its ability to produce power on very
6 hot days. It's going to have emissions of some
7 pollutants, as you'll hear later, that are higher.
8 It's going to have emissions of other pollutants
9 that are much lower. And, on balance, we think
10 it's going to be better.

11 The impacts are different and that's why
12 we're here today is we analyzed what the effect of
13 the change is and we have proposed additional
14 mitigation where we thought it was necessary. In
15 cases where, for some pollutants the emissions
16 were actually going down and so less mitigation is
17 required. But, on the whole, as I said, I think
18 that what we're proposing is a better package.

19 MS. LAGANA: So, if you didn't know the
20 full capacity of this plant prior to your buying
21 it, is that what you're saying to me, that the
22 full capacity of what this plant was capable of
23 was not evident to you until you did an
24 investigation, I guess after you signed the sale
25 papers?

1 MR. RUBENSTEIN: We knew, Calpine knew,
2 what the capacity was as Enron had designed it, at
3 the time that Calpine bought it.

4 MS. LAGANA: Which was prior to or after
5 the permit?

6 MR. SOMMER: It was after the permit.
7 Enron received the permit and then subsequently we
8 purchased the project. That was a condition of
9 our purchase, that they have the permit in hand.

10 MS. LAGANA: So did you purchase it with
11 the intent that there may be modifications you
12 would make?

13 MR. RUBENSTEIN: I think it's fair to
14 say that anybody who buys a project is going to
15 look to see whether they can make it better, and
16 so I don't think that that's unusual in this case.

17 MS. LAGANA: Is there a way for you to
18 make it better without making it bigger?

19 MR. RUBENSTEIN: In this particular
20 case --

21 MR. SOMMER: Well, I think you've said
22 that we've done that by looking at some of the
23 emissions assumptions that Enron used and we are
24 making different assumptions and committing to
25 lower emissions, for instance for what, startup

1 and shutdown?

2 MR. RUBENSTEIN: That's right.

3 MR. SOMMER: Than the previous
4 applicant, therefore, yes, we've improved it in
5 those terms.

6 MS. LAGANA: But in some of those
7 emissions we're talking about a major increase.
8 We're talking about an increase of over a hundred
9 percent in some of the sulphur oxide emissions and
10 things like that -- I mean carbon monoxide
11 emissions, we'll get to that later, according to
12 these tables.

13 Okay, thank you.

14 MR. TATAMER: Yeah, my name is Alan
15 Tatamer. My question is perhaps premature, but I
16 wanted to hear from you the relevance and sort of
17 the connection between the increase in the BTUs
18 and the pollutants emissions. Is that going to be
19 addressed very soon?

20 MR. SOMMER: Yes.

21 MR. TATAMER: Okay, then I'll be back
22 up.

23 MR. SOMMER: Again, Gary will discuss
24 probably each of these again from an emissions
25 standpoint. So, if there's no other questions on

1 the duct burner size I'll move on to the auxiliary
2 boiler.

3 The auxiliary is a standby piece of
4 equipment that is installed on the site primarily
5 to satisfy our steam host when the main plant is
6 not operating. By steam host I mean that we
7 actually take a portion of steam that we generate
8 and route it off-site through a pipeline to USS
9 Tosco and they use that steam, the heat from that
10 steam, in their processes that they do in the
11 manufacture of steel.

12 If our powerplant, for whatever reason,
13 is not operating and we cannot export that steam,
14 we still have a contractual obligation to provide
15 that steam to our steam host, USS Tosco.

16 So the auxiliary boiler is a stand alone
17 piece of equipment at the site that can be
18 operated at any time that we need it to provide
19 that backup steam supply.

20 The increase in size is essentially due
21 to a miscalculation in the way it was sized
22 previously. To produce the amount of steam that's
23 required per the contract -- again, a contract
24 that we purchased along with the plant from the
25 previous applicant, you could not generate that

1 quantity of steam with the heat input that they
2 had licensed.

3 So, I don't know if they did that
4 intentionally or not, but we certainly feel that
5 we need to be able to produce the contractual
6 quantity of steam for our steam host in the event
7 that our plant is shut down. So that's why we've
8 had to increase the size of the auxiliary boiler.

9 The auxiliary boiler does not, on a
10 normal basis, contribute to any power generation.
11 All it makes is steam at a low pressure that goes
12 to our steam host.

13 MS. BLACKWOOD: I have a question about
14 that. I'm not sure I understand how --

15 COMPLIANCE PROJECT MANAGER SCOTT: What
16 is your name?

17 MS. BLACKWOOD: I'm sorry, I'm Cecilia
18 Blackwood from the Central Addition Neighborhood.
19 I don't quite understand how a powerplant can get
20 licensed or permitted through the CEC without the
21 CEC knowing something about how the plant is
22 designed and how it's proposed to operate.

23 I mean that would be like me licensing
24 my powerplant and telling you everything was going
25 to be wonderful, but I'm going to run it off of a

1 five-horsepower gasoline motor.

2 Now, if you guys don't explore and don't
3 look into the design and the equipment that
4 they're going to put in these powerplants, how
5 many of them are going to get permitted with
6 hundreds and hundreds and hundreds of amendments?
7 How many people in the state of California -- and
8 I'm speaking right now for the Central Addition.
9 We're looking at an increase in the pollutants in
10 our neighborhood and we've walked through every
11 step of this process with this powerplant and this
12 is not what we bargained for at all.

13 Now, there's got to be a way for the
14 Energy Commission, when you guys license these
15 plants, to know if they're going to be operating,
16 how they're set up and how they're permitted at
17 their optimum capacity, without having to come
18 back later and give everybody who lives around
19 them the big surprise.

20 And I don't know how you would go about
21 doing that, but I don't understand how there can
22 be this much difference and you guys not --
23 somebody in the Energy Commission not understand
24 that.

25 COMPLIANCE PROJECT MANAGER SCOTT: I

1 think that your concerns about the generating
2 capacity will be handled by Steve Baker. And, as
3 I stated previously, and as did Dave Mundstock, we
4 have a conceptual knowledge of what is going on.
5 We look at the environmental impacts and if you
6 read the staff analysis when we certify a project
7 it has a nominal generating capacity. Okay.

8 And when Steve explains more about that
9 then you'll understand, but I'm not going to try
10 to go into that. But we do know what we're
11 licensing. We look at the environmental impact.
12 We do look at the engineering, but generally what
13 happens is that many project owners when they come
14 in, they just have the conceptual, they don't have
15 all the details. And we don't expect them to,
16 because it's -- I don't know, that would just be
17 too much. They'd never get through the process,
18 bringing all of the details in.

19 But that's why we oversee the
20 construction and operation of the facility. Okay.

21 MS. BLACKWOOD: Part of the problem is
22 that just in the very end everything that happens
23 from the time that a powerplant is permitted until
24 the day it's shut down on a permanent basis, all
25 of those things all come back to environmental

1 impact in the surrounding area.

2 And so, for that reason, I think that
3 maybe, you know -- I know you guys just went
4 through a whole thing of trying to figure out a
5 new way to do the siting process and make it
6 quicker, but maybe in some areas you need to know
7 more than you get, and that's my point. It would
8 save this from happening down the road.

9 COMPLIANCE PROJECT MANAGER SCOTT: Thank
10 you.

11 MR. SOMMER: The next component of the
12 amendment request is a reduction in the combustion
13 turbine startup and shutdown emission rates. In
14 this amendment we will be committing to lower
15 emission rates during startup and shutdown, and
16 the previous applicant -- these are similar or
17 identical emissions to the other projects that
18 Calpine has licensed, such as the Delta Energy
19 Center, or is attempting to license in the Bay
20 Area.

21 Again, the reason for this is our -- I
22 guess what we feel is more accurate knowledge of
23 the operating characteristics of this equipment,
24 primarily through our existing plants, such as
25 plants in Texas where we have similar equipment

1 operating. Also through Sierra Research, Gary
2 Rubenstein's experience with similar equipment,
3 such as the GE combustion turbine at the Crockett
4 cogen facility in Crockett, California.

5 So that is a project improvement from an
6 environmental standpoint in that issue.

7 Are there any questions on combustion
8 turbine startup, shutdown emissions?

9 MR. MacDONALD: Jim MacDonald, C.A.R.E.

10 I do have some questions that I do want
11 to ask or information that I want to receive, but
12 I was wondering if it's okay if I hold that until
13 the end instead of having to piecemeal this
14 together.

15 COMPLIANCE PROJECT MANAGER SCOTT:
16 That's all right, it's perfectly all right.

17 MR. MacDONALD: Thank you.

18 COMPLIANCE PROJECT MANAGER SCOTT: Would
19 you mind repeating that Jim? I don't think
20 someone in the back heard you?

21 MR. MacDONALD: My question was
22 basically that can I hold my question until the
23 end and they said that was appropriate.

24 MR. SOMMER: The next item in the
25 amendment is the addition of a diesel fired fire

1 pump and a natural gas fired emergency generator.
2 These I believe were always envisioned to be part
3 of the project, but were not included in the
4 original license.

5 I want Gary to address some of the
6 requirements as far as emissions, because I don't
7 want to misspeak, but I don't believe that these
8 are regulated in the same manner as our other
9 emission sources, but they do need to be included
10 in the modeling of the impacts and that's why we
11 added them when we did this amendment to include
12 them, so that their impacts would be included with
13 the balance of the plant.

14 The diesel fired fire pump, we have two
15 fire pumps at the site. One is driven by an
16 electric motor, one is driven by a diesel fuel
17 pump or engine, so that if we lose electric power
18 we have a back up method of operating our fire
19 systems.

20 The pump itself would only operate
21 during a fire, which we hope to never have, and
22 then it operates during testing which occurs -- I
23 believe we've licensed it for a one-hour test per
24 week.

25 The natural gas fired emergency

1 generator again is something that we don't intend
2 to use on a regular basis, only if the plant is
3 shut down for some reason because of an equipment
4 failure or something of that nature. And the gas
5 fired generator is 600 kilowatts, a fairly small
6 unit and, again, only would operate during an
7 emergency event.

8 The final item is to revise our air
9 emissions mitigation -- oh, I'm sorry, go ahead.

10 MS. LAGANA: Excuse me. So on these two
11 -- the emergency generator, are you telling me
12 there's no emergency generator right now included
13 in this facility?

14 MR. SOMMER: There will be, yes.

15 MS. LAGANA: No, I'm saying as it is
16 presently permitted, is there an emergency
17 generator?

18 MR. SOMMER: As it is permitted? No,
19 that's why we've added it to the amendment. We're
20 adding it through an amendment, because there is
21 no emergency generator.

22 MS. LAGANA: So there's no backup
23 system?

24 MR. SOMMER: Currently permitted.

25 MS. LAGANA: In this powerplant as it

1 was permitted last year? Can somebody address
2 that?

3 COMPLIANCE PROJECT MANAGER SCOTT: Yes.

4 MR. SOMMER: That's correct.

5 MS. LAGANA: Don't routinely, don't
6 powerplants have to come off line for repairs,
7 for, you know -- didn't they have to put off a
8 whole bunch of powerplants off line this past fall
9 in order to, you know, do routine maintenance?
10 Doesn't that happen?

11 MR. SOMMER: Emergency power can be
12 obtained through the grid. We're connected to the
13 grid. If our powerplant is off line, normally
14 we'll take power from PG&E backwards through our
15 outgoing transmission lines into the plant, so
16 that when we're not generating we have power.

17 If we lose that then, again, it's making
18 a choice of do we want to have an emergency
19 generator? It could be different sizes. If we
20 decided that we weren't able to do something
21 called black start, which means that we don't have
22 adequate supply from the utility, we could run a
23 black start generator, which is basically a larger
24 emergency diesel generator to start the plant, but
25 we don't have that.

1 And that's an economic decision that's
2 based on where you're at geographically. We're in
3 a place where we have fairly reliable utility grid
4 power.

5 MR. RUBENSTEIN: I think in answer to
6 your question, Paula, no, it's not necessary to
7 have an emergency generator as part of a project.
8 Most of the developers I've worked with choose to
9 have one for exactly the kinds of reasons that
10 Mike talked about. Enron, apparently, did not.

11 MR. BERTACCHI: And I think we should be
12 clear that normally that's only used when, not
13 only is the plant down, but when the grid is
14 totally black, that's when that emergency
15 generator would come on. The only other time it
16 would operate is when it was being tested.

17 MS. LAGANA: Has the grid been totally
18 black this year?

19 MR. BERTACCHI: In the last two years
20 that I've been involved in the project in
21 Pittsburg, we had, I think, two outages in the
22 last two years. One, where actually the 115 kv
23 system went down. One was a lightning strike
24 related. So they're very short duration periods
25 and that's one reason why a lot of developers --

1 some developers choose not to have emergency
2 generators, because if you look at the potential
3 reliability of the grid, and you say even if I
4 have an outage it may only be 15 minutes long,
5 they may choose not to have an emergency
6 generator. We like to err on the safer side.

7 MS. LAGANA: So this would act as an
8 uninterrupted power source?

9 MR. RUBENSTEIN: For essential
10 operations. As Mike said, it's not big enough to
11 start the plant, but it's big enough to keep the
12 lights on and the computers running and the
13 control systems running.

14 MS. LAGANA: So it's sort of like an
15 uninterrupted power source -- you know, basic
16 power that would do, let's say in a --

17 MR. SOMMER: We have batteries as well,
18 but those batteries are only designed to last two
19 hours. So this generator essentially keeps those
20 batteries charged if they have to operate for an
21 extended period of time.

22 MR. BERTACCHI: It's really not an
23 uninterruptable power source because the generator
24 won't be on all the time. We would go in the
25 black, then we would start the generator to make

1 sure we keep charging the batteries for the
2 uninterruptable power supply.

3 MS. LAGANA: And the diesel fuel fire
4 pump, are you telling me there's no fire pump
5 available?

6 MR. SOMMER: Yes, we will have two fire
7 pumps. One is electric, motor driven and the one
8 that we want to permit is a diesel-fired backup.

9 MS. LAGANA: But did the plant come with
10 some kind of fire pump --

11 MR. SOMMER: Electric --

12 MS. LAGANA: The electric one, and
13 that's not adequate?

14 MR. SOMMER: It's not adequate to
15 Calpine.

16 MS. LAGANA: Okay.

17 MR. SOMMER: Okay. The final item is
18 our revision to air emission mitigation. That
19 mitigation comes in the terms of emissions
20 reductions credits, correct, Gary?

21 MR. RUBENSTEIN: Yes.

22 MR. SOMMER: And the net result of some
23 of the increases and some of the decreases is that
24 we have a net increase in our potential emissions,
25 therefore, we've had to purchase additional

1 emissions reductions credits.

2 These were credits actually that came
3 with the project that we purchased from the
4 previous applicant. They had credits in excess of
5 what they needed, so we didn't actually have to go
6 and seek out and purchase additional credits, they
7 were credits that we had already purchased with
8 the previous project.

9 I'd suggest then that, Gary, you kind of
10 go back to the top and do a summary on emissions
11 air quality?

12 MR. RUBENSTEIN: Okay.

13 As one of the earlier speakers, I think,
14 said, there are a whole lot of numbers here. I'm
15 not going to go through all of them. I think the
16 Commission staff is going to summarize them and
17 I'll certainly be happy to answer any questions.
18 But what I'm going to do is briefly talk about
19 which of these changes resulted in changes of
20 emissions and whether the emissions went up or
21 down as a result.

22 First of all, looking at the fuel
23 consumption limit increase for the gas turbine.
24 What we had found in doing a review of the project
25 as it was originally permitted is that the

1 turbine, in fact, was not licensed to allow it to
2 generate its maximum output at very cold
3 temperatures.

4 A lot of the calculations that were done
5 were based on average temperatures. We wanted to
6 make sure that the emissions calculations were
7 done based on a true worst case, which, for the
8 turbine alone, is actually, on a cold winter day,
9 and as a result we calculated higher emissions to
10 represent that new worst case for some of the
11 pollutants.

12 For the operation of the duct burners,
13 the increase in the size of the duct burners also
14 results in an increase in emissions during those
15 hours when the duct burners are operated and we
16 adjusted the calculations to take that into
17 account.

18 The larger size of the auxiliary boiler
19 resulted in, again, an increase in emissions that
20 we took into account. On the reduction side, we
21 reviewed the assumptions regarding the emissions
22 during the startup and believed that they were
23 substantially overstated and, as a result, we
24 proposed some fairly dramatic reductions in
25 startup emissions based on our experience

1 reviewing startup data from other plants.

2 And, as Mike said, the numbers that
3 we're proposing here are consistent with those
4 that Calpine has proposed at its other projects
5 and that the Commission has approved in other
6 projects.

7 So some of the changes resulted in
8 increases, some of them resulted in decreases in
9 emissions. Sometimes the increases were on an
10 hourly basis, sometimes a daily, sometimes an
11 annual. The bottom line on an annual basis was
12 that there's roughly a 15 percent increase in NOX
13 emissions associated with all of these different
14 changes; a four percent increase in carbon
15 monoxide emissions; a 63 percent reduction in
16 emissions of hydrocarbons; a seven percent
17 increase in particulates; and an 18 percent
18 increase in SOX emissions.

19 So the net is that on a total trends
20 basis for all of the compounds, that from PM10 in
21 the air, is that it's probably about a wash or
22 perhaps a slight reduction. All of the increase
23 in emissions required additional analysis and
24 additional mitigation which we proposed as part of
25 this package.

1 And, as I said, I'm not going to go into
2 all of the numbers at this point, but I'll be
3 happy to answer any questions.

4 MS. BLACKWOOD: If in the end you have
5 close to a wash or a reduction in all of your
6 pollutants basically, why is it necessary to buy
7 extra offset credits? I mean is that all taken
8 into account when you need extra credits, is
9 everything all in one --

10 MR. RUBENSTEIN: Not all of the -- we
11 had a reduction, for example, in hydrocarbon
12 emissions of about 60 or 70 tons per year. We
13 used some of that reduction to mitigate our
14 additional NOX emissions. Under the rules that
15 the Bay Area district has however, we could not
16 use those reductions to mitigate our particulate
17 emissions increases and so that's why we had to go
18 and buy some more credits.

19 In effect, we had some additional
20 credits we're going to have to provide, some
21 credits are going to end up getting returned. In
22 terms of what's actually going into the air, as I
23 said overall, it's a net wash, but, because of the
24 Bay Area district's accounting rules for different
25 pollutants, we're getting back more credits of one

1 pollutant and we have to provide a smaller
2 quantity of credits for a different pollutant.

3 MS. BLACKWOOD: Okay.

4 MR. RUBENSTEIN: This is worse than the
5 tax code, let me tell you.

6 MS. BLACKWOOD: What a confusing thing
7 that is.

8 MR. RUBENSTEIN: To repeat what I just
9 said, the overall changes in emissions on an
10 annual basis are roughly a 15 percent increase in
11 NOX emissions, oxides of nitrogen, one of the
12 compounds that form smog; four percent increase in
13 carbon monoxide; a 63 percent reduction in
14 hydrocarbons, which is another component of smog;
15 a seven percent increase in particulates; and an
16 18 percent increase in sulphur oxide emissions.

17 MR. TATAMER: I'm going to jump up here
18 and again push my case. I see here on the date of
19 this document that was basically sent in and
20 received by the Energy Commission on the 20th of
21 this month, was that correct?

22 MR. RUBENSTEIN: Which document are you
23 referring to?

24 MR. TATAMER: I'm looking at actually
25 the notice of the workshop.

1 MR. RUBENSTEIN: Oh, the notice of the
2 workshop was, yeah.

3 COMPLIANCE PROJECT MANAGER SCOTT: No,
4 that's not right. The date you're referring to on
5 that document is the date that we put it in our
6 official record at the Commission. That November
7 20th date was the date that we put it in the
8 official file and it's available for any member of
9 the public to review and get copies of.

10 MR. TATAMER: At this date, November
11 20th?

12 COMPLIANCE PROJECT MANAGER SCOTT: Yes,
13 that's when --

14 MR. TATAMER: So basically it's been,
15 we've had eight days.

16 COMPLIANCE PROJECT MANAGER SCOTT: It
17 was sent out on the 17th.

18 MR. RUBENSTEIN: Are you asking about
19 when this application and all this material was
20 available?

21 MR. TATAMER: This particular notice of
22 the workshop.

23 MR. RUBENSTEIN: That particular notice.

24 COMPLIANCE PROJECT MANAGER SCOTT: That
25 was put in the mail on November 17th.

1 MR. RUBENSTEIN: Okay, but it's posted
2 here as November it was received in dockets.

3 COMPLIANCE PROJECT MANAGER SCOTT:
4 That's when it was docketed, yeah.

5 MR. TATAMER: You know, there's a lot of
6 good information here. What strikes me as a
7 layman is really what's absent and I'm kind of --
8 you know, it's very striking that we're talking
9 about particulates, we're talking about NOX, some
10 of these pollutant elements, but yet there's no
11 description of just exactly what these are, any of
12 the health effects that they have, either short
13 term or long term.

14 I would expect the Energy Commission
15 would, you know, maybe mandate that as part of an
16 application.

17 My comment on, well, as when this was
18 received, just the fact that this is a hefty
19 document -- and, again, as a layman, with half a
20 brain, you know, I'd like to have more notice, you
21 know, so I could digest this, so we could actually
22 have a detailed discussion and a knowledgeable
23 discussion on a lot of these issues.

24 It strikes of sort of bad politics and
25 typical politics when, you know, we're not given

1 any advance notice even though technically it's
2 been available for a whopping seven days. I think
3 it -- things like this basically just contribute
4 to the cynicism that a lot of people have towards
5 government and this project in particular.

6 I'm not done, I'll be back.

7 MR. LENGYEL: Gary?

8 MR. RUBENSTEIN: Yes.

9 MR. LENGYEL: Hello, Mike Lengyel again.
10 As I recall, the tonnage on the criteria
11 pollutants was about 900 tons a year, 908 tons
12 before the amendment on those five criteria
13 pollutants.

14 I'm just trying to determine how many
15 tons of pollutants are going to come out of there
16 a year and how many emission reduction credits are
17 going to be required, how many tons a year of
18 emission reduction credits are required.

19 MR. RUBENSTEIN: I understand your
20 question, just give me a second.

21 COMPLIANCE PROJECT MANAGER SCOTT: There
22 are seats, would you like to move up, so that you
23 can hear better?

24 MR. TATAMER: While there's a dead
25 space, maybe I should ask this in a question. Why

1 is there not detailed environmental impact
2 reports. We're talking about a powerplant here,
3 we're not talking about an amusement park. You
4 know, we've got significant chemicals, pollutants,
5 NOX, why is this not made part of the public
6 record and part of this staff workshop?

7 COMPLIANCE PROJECT MANAGER SCOTT: We
8 completed an analysis on public health. I'm
9 afraid I don't know how much more detailed you
10 wanted us to be. What we do is we analyze the
11 information that is given to us.

12 What Calpine submitted to us in this
13 petition we analyzed. We felt it was sufficient
14 enough to come up with a decision or a
15 recommendation to the Commission and I'm not
16 really understanding, what more did you want?

17 MR. TATAMER: Well, I guess I'm
18 questioning your responsiveness to the public.
19 You know, as the California Energy Commission, as
20 a government entity in charge, if I'm not
21 mistaken, of regulating and licensing this
22 powerplant, which by it's very nature is hazardous
23 to one's health, it just -- I'd like to know
24 what -- I'd like to know some of the statistics
25 on --

1 ENVIRONMENTAL PROTECTION OFFICER RINGER:

2 Okay, the purpose of the public health analysis,
3 and I'm speaking to that in particular, is that we
4 are analyzing strictly the changes that were
5 proposed by the Applicant. The basic analysis,
6 with all the background information and the higher
7 level of detail was done for the original project.
8 We didn't see that it was necessary to redo all
9 that analysis just for the changes, because if you
10 want to look at the original calculations and all
11 the assumptions that went into the public health
12 analysis that's still all available in the
13 original record for this project.

14 So this is strictly an incremental
15 assessment. In other words, if the level of
16 detail is this much originally and they're
17 proposing this much change, this is what we look
18 at now. We don't duplicate the original record.

19 MR. TATAMER: Well, that's obvious, and
20 I guess I'd just like to see the bar raised a
21 little bit. It would be very easy to put together
22 on a couple of the back pages here, sort of an
23 environmental impact on what effects sulphur
24 dioxide, particulate matter, whatnot, have on
25 humans.

1 MR. RUBENSTEIN: You know, I think you
2 make a very good point. What the problem is here
3 is that those of us who worked on this, assumed
4 that anyone who is reviewing this amendment,
5 reviewed the Energy Commission's approval of the
6 project originally, which is where that
7 information was. And I think it's a good
8 suggestion that we should not assume that and we
9 should probably provide a summary for the public
10 of what each of these pollutants are and what
11 these numbers all mean.

12 MR. TATAMER: Absolutely. In fact, I
13 think that as the public we should absolutely
14 demand it. You know, this is a public discussion.
15 You know, we need to have all these facts in front
16 of us in order to make an informed decision, and I
17 think the problem is the fact that people don't
18 have all the facts.

19 We're getting filtered information and
20 I'd like to see that happen and have that event
21 publicly announced, you know, with enough warning,
22 more than a week's notice, so that we can actually
23 get a turnout.

24 ENVIRONMENTAL PROTECTION OFFICER RINGER:
25 Are you looking for a summary of what has been

1 done in the past or are you looking for something
2 that's a little bit more detailed than just a
3 summary?

4 MR. TATAMER: No, no, I think a summary
5 would be fine, a summary would be fine. Again, as
6 an activist and as a citizen, you know, in
7 Pittsburg, and basically as a neighbor and home
8 owner in the Central Addition, which is the
9 neighborhood that really is most closely impacted
10 by this facility -- and incidentally the
11 neighborhood that was first approached by the
12 officials of Enron when they were looking for an
13 endorsement, you know, it's our children, it's our
14 lungs, you know.

15 Looking through here cursorily, and
16 again, I'm not going to say that I've had enough
17 time to really digest this, which, you know, I
18 think I've made my point, you know, they say that
19 they're, you know, within a hundred meters,
20 typically you've got most of the particulate
21 matter dissipating. But, you know, on a good or
22 bad day, depending on the prevailing winds, that
23 means the top of our homes, our front yards.

24 So my objection, as is a lot of people
25 who I've talked to, particularly in this

1 particular neighborhood is the fact that, you
2 know, you've got six, seven homes that are next
3 door to this. And I would like to see, I guess
4 number one, better documentation, summary form
5 would be better, as long as the information is
6 accurate. And I'd like to see more advance
7 notice.

8 Jeri, I talked to you back in June, when
9 it was brought to the group's attention that they
10 had originally petitioned. And I just find it,
11 you know, ironic that, you know, it's taken until
12 a week ago to finally get this document out in the
13 public. You know, we should have had this thing
14 out months and months and months so that we
15 could -- I made my point.

16 COMPLIANCE PROJECT MANAGER SCOTT: Okay.
17 To address one thing. We can't get the
18 information out to you until we have it. We
19 haven't been just sitting on our duffs here at the
20 Commission. A petition was filed. We asked for
21 additional information.

22 We're also working with our sister
23 agency in the District and they've completed their
24 analysis, and we're working together on this
25 thing. We have just completed it and we got it

1 out as fast as we could.

2 Our official notification is ten days.
3 If we have a workshop we have to give you at least
4 ten days. And so what we're looking at, too, is
5 getting it out to you and also we're looking at
6 trying to get a decision to Calpine because their
7 petition has been in since May, but it's just
8 taken this long.

9 This is a complex amendment, very
10 complex, and it has just taken us this long. And
11 also because we have so many other projects to
12 work on. If this was our only project, then it
13 would have been different, but we're siting other
14 projects. We have other projects that are in
15 construction and that's what happened, and my
16 apologies for not getting it to you sooner. But
17 what I wanted to do was get the analysis out to
18 you and get your comments back, within our 30-day
19 comment period, so that we could move to the
20 earliest Business Meeting.

21 I don't want to rush you, because, as
22 you said, this is your neighborhood and your
23 homes. I'm going back to Sacramento. So, I mean
24 I want to work with you. If it need be, we'll
25 have another workshop, if that's what you need.

1 Okay. Thank you.

2 MS. HUGMAN: I am Nancy Hugman. I'm a
3 Pittsburg citizen and with CAP-IT. And I concur
4 with this gentleman.

5 We talked a lot when we had the little
6 meetings with --

7 COMPLIANCE PROJECT MANAGER SCOTT:
8 Lorraine White?

9 MS. HUGMAN: Yes, it was another woman,
10 yeah.

11 COMPLIANCE PROJECT MANAGER SCOTT: Yes,
12 she's Siting Project Manager.

13 MS. HUGMAN: And most of our speaking
14 was about our health and so that we have very
15 little information here tonight for the citizens
16 about our health, does bother me.

17 I'm not big on knowing what all this
18 stuff is, but what I want to know is what level
19 are we in, counting this plant and upgrade to this
20 plant and the, what, ten other plants that we
21 have, and you're buying credits from a glass plant
22 that has been closed for how many years? You all
23 don't know how many years this glass plant has
24 been closed that all of a sudden we're buying
25 credits for so that we can pollute, because it

1 once polluted?

2 MR. RUBENSTEIN: I can answer that
3 question, but did you want to finish --

4 MS. HUGMAN: Well, what I want to know
5 is how close are we, as an area, to a red alert,
6 let's die now, you know? Let's suck in this air
7 and gradually kill ourselves, because everybody
8 seems to be talking in fragments.

9 Well, it's just a little more. Well,
10 it's just a little more, plus ten other plants and
11 I'm wondering about the wisdom of Calpine, who
12 bought a broken toy and didn't realize it was
13 broken and now has to come to get permission to
14 get it fixed.

15 It seems like you all would have looked
16 really close, and said, hum, this thing is broken,
17 I think it's kind of risky. This thing isn't
18 going to work the way it is.

19 So I feel like we are getting snowed and
20 nothing here has convinced me otherwise. But I
21 would like to know, in the big picture and not
22 just these fragmented pictures, what is our
23 pollution level and what does it mean to our
24 health? Thank you.

25 MR. RUBENSTEIN: Let me first ask, was

1 it Mike, your question.

2 MR. LENGYEL: Yes, sir.

3 MR. RUBENSTEIN: I normally don't like
4 to add emissions from all the different pollutants
5 together because it is really mixing apples and
6 oranges, but, in answer to your question, Mike, if
7 you do add all the apples and oranges up, the
8 emissions from the plant, as it was originally
9 permitted by the Energy Commission, was a maximum
10 of 902 tons per year.

11 If you add those apples and oranges up
12 again for the plant, as we've proposed it today,
13 the total is 895 tons per year, seven tons less.
14 And, so as I said earlier, it's about a wash.

15 MR. TATAMER: This is collective
16 pollutants?

17 MR. RUBENSTEIN: This is all the
18 pollutants that are emitted from all the stacks at
19 the plant.

20 In answer to your question about the
21 emission reduction credits, the pollution credits.
22 The pollution credits, it's a very difficult thing
23 to explain, because it doesn't make a whole lot of
24 sense.

25 MS. HUGMAN: You're right, it doesn't,

1 it's a way of snowing us.

2 MR. RUBENSTEIN: It's not, and I don't
3 mean that disrespectfully. It's not intended to
4 snow anybody. The whole idea of pollution credits
5 has been around for about 20 years. Before that,
6 people could build anything they wanted to and as
7 long as they could show that their project wasn't
8 going to cause a violation of an ambient air
9 quality standard, it was okay. And frankly, that
10 was a loophole big enough to drive an oil refinery
11 through and a couple of companies in the 1970s
12 drove oil refineries right through that loophole.

13 The whole idea behind pollution credits
14 was to get a way of managing the air pollution
15 from growth. Growth is inevitable and either you
16 can let it go unabated, which is what happened in
17 the sixties and seventies, in terms of industrial
18 facilities, or you can try to manage it.

19 Pollution credits are not a way to allow
20 a company to build a dirty plant. What pollution
21 credits are is -- in order to build a plant of any
22 type you have to first prove to the air agencies
23 that the plant is clean and that it's safe. It
24 has to use the best pollution control technologies
25 available and you have to do some fairly

1 sophisticated modeling analyses to show you're not
2 going to create any health problems.

3 If you find a plant that's going to
4 create health problems, they can't pay their way
5 out of it by buying pollution credits. You're not
6 allowed to do that. The plant just doesn't get
7 built.

8 So the first hurdle you have to go
9 through is you have to prove the plant is going to
10 be safe.

11 MS. HUGMAN: The one plant or the plant
12 plus ten others?

13 MR. RUBENSTEIN: The plant plus
14 everything that's in the air already. You have to
15 prove that all of it together is still going to be
16 safe.

17 Now, once you've made that showing,
18 that's still not enough to get a permit to build a
19 plant, because in many cases what the plant is
20 doing is it's adding to existing levels of
21 pollution that are already above the air quality
22 standards, and that's where the pollution credits
23 come in. Because the reason why the levels are
24 above the air quality standards is because of all
25 of us. Everything we do generates air pollution

1 and that's why I get back to a way of trying to
2 manage that growth.

3 The pollution credits are a system
4 designed to make sure that pollution from
5 industrial facilities keeps going down even as new
6 facilities are being built. And so pollution
7 credits aren't a substitute for making sure that a
8 plant is safe, it's an additional requirement.

9 Pollution credits aren't something that
10 Calpine or any other developer chooses to do to
11 avoid a requirement, it's something they have to
12 do in addition to meeting all the other
13 requirements.

14 MS. HUGMAN: Well, I frankly don't care
15 if you buy a pollution credit from San Jose
16 somewhere and put it here. I'm not concerned with
17 what San Jose is sucking, I'm concerned with what
18 we're sucking here. And so my -- you say you have
19 to prove that all of these plants together are not
20 a health hazard to us.

21 MR. RUBENSTEIN: Right.

22 MS. HUGMAN: Prove it. Tell me what it
23 is. Tell me how low are overall emissions,
24 including our cars and everything else that's
25 being done here in our community, how -- tell me

1 how low it is so that we're going to feel great
2 about how healthy we're going to be, when you add
3 your extra bit that you didn't know was going to
4 be needed.

5 MR. RUBENSTEIN: Well, actually we
6 didn't just analyze the extra bit, we reanalyzed
7 the entire plant. And in the application that we
8 sent to the Commission and to the Bay Area air
9 district back in May we did exactly what you asked
10 and we showed that when you add the pollution
11 levels from the entire plant, not just this extra
12 bit, and add it to the highest background levels,
13 that the worst case concentrations on the worst
14 case hour, the worst case day, putting all of
15 these things together, we're still better than the
16 state and federal air quality standards, with one
17 exception. And that one exception is
18 particulates.

19 For particulates virtually the entire
20 state of California exceeds the state air quality
21 standard. Virtually the entire state of
22 California is in compliance with the federal
23 standards, so we're in between the two standards.

24 MS. HUGMAN: You mean is out of
25 compliance.

1 MR. RUBENSTEIN: No, virtually the
2 entire state is in compliance with the federal
3 standard and is out of compliance with the state
4 standard. It's in between the two levels.

5 What we showed in our analysis is that
6 our plant isn't going to create any new violations
7 and that in addition to that we had to provide
8 emission reduction credits as our contribution to
9 cleaning up the mess that's already in the air.
10 But all of that analysis, like I said, was done
11 when we submitted the application in May and both
12 the Bay Area district and the Energy Commission
13 have to review that and they have to decide
14 whether we've done it right or not.

15 MS. HUGMAN: And what are the health
16 consequences to particulates?

17 MR. RUBENSTEIN: Particulate emissions
18 are known to be correlated with incidences,
19 increased frequency of asthma and other
20 respiratory problems.

21 MR. SOMMER: Before you ask your
22 questions, Cecilia, I just want to go ahead and
23 respond to your question regarding the plant and
24 is it broken, are we fixing it?

25 The plant, as permitted, could have been

1 built and operated within the permit that we
2 bought it with, but as, you know, Calpine's
3 corporate philosophy and our planning to own and
4 operate this plant for 30 years, we chose to do
5 what's, you know, obviously very difficult and
6 costly to make these changes. You know, call it
7 buying a used car and wanting to get a paint job
8 for it.

9 These are, as this analysis shows, these
10 are not significant monumental changes, these are
11 small incremental changes. And we chose to make
12 those. We could have built it as licensed. We
13 chose to go through the process, work with the
14 Energy Commission and the Bay Area air district to
15 get these amendments, see if they could be
16 approved and get what we think will be a plant for
17 us, for Calpine.

18 So that, to respond to your question, is
19 it something that was broke? No, I don't think
20 so, but we've improved what it was that we bought.

21 MR. BERTACCHI: But, Mike, I'd like to
22 extend that further. You know, we've been under a
23 lot of -- you know, there's a lot of information
24 that the public is aware of, that there's been a
25 lot of energy crises in the Bay Area, there's not

1 enough generation to support all the load during
2 the summer peaks.

3 This was an opportunity for Calpine, the
4 ISO, other parties who know that energy is needed,
5 to incrementally provide the small increase in
6 output of this plant that will be used to offset
7 those needs for energy during those peak periods
8 and these will be among the cleanest megawatts
9 incrementally generated in the whole state.

10 MS. BLACKWOOD: Actually I -- this is
11 kind of a strange thing for me to do, because
12 usually I'm up here chewing on you guys. But
13 possibly if you could get these people a copy of
14 the original amendment that was filed in May of
15 2000 there's a section in here that says "Chronic
16 Inhalation Exposure Report" and it pretty much
17 covers the gambit as far as what's in the air. It
18 helped me a lot as far as, you know, learning
19 what's out there.

20 And I know this has been in the public
21 record for quite some time and we talked about it
22 at a couple of neighborhood meetings, but you
23 might find a whole bunch of answers in here. I
24 don't know if you can get a copy of this.

25 Mike, you probably have one, don't you.

1 Anyway, I just thought it might be helpful if you
2 guys could get some extra copies running around
3 out here it might help answer some questions, you
4 know, for people around. It helped me, I know
5 that.

6 COMPLIANCE PROJECT MANAGER SCOTT: I
7 have my cards and if anyone wants a copy of the
8 petition, I'll see that you get a copy. It's your
9 right to have a copy of the petition and of the
10 staff's analysis.

11 MR. LENGYEL: Gary, I just wanted the
12 second half of my question answered, how many tons
13 of emission reduction credits does this require
14 before the amendment and after the amendment?
15 Thank you.

16 MR. RUBENSTEIN: Let me answer that
17 after I turn on my calculator. So if you want to
18 continue on with some other questions, I will get
19 that answer for you in just a few minutes.

20 MS. LAGANA: I have a question for the
21 Commission and that is this amendment process had
22 to be put in place because there would be an
23 incident where, after permit was given, something
24 needed to be adjusted? Is that why this amendment
25 period was created?

1 SENIOR STAFF COUNSEL MUNDSTOCK: That's
2 basically right. I mean the Commission has a
3 regulation, which is 1769 of our regulations, that
4 allows an applicant to petition to make a change
5 in its project, actually requires it. The
6 applicant can't just do something willy-nilly. If
7 they want to change the project, they have to come
8 to the Commission, get our permission and, if
9 necessary, go through the kind of analysis you
10 have before you here on this type of amendment,
11 because there are potential environmental impacts
12 here. That's why they have to get the offsets and
13 go -- that's why it's also taken over half a year,
14 because there were various things that had to be
15 analyzed.

16 Many applicants, most, will produce some
17 amendments during the course of the time that they
18 would be operating projects. So that's considered
19 normal.

20 MS. LAGANA: During the project?

21 SENIOR STAFF COUNSEL MUNDSTOCK: Yes.

22 MS. LAGANA: You mean after the permit
23 is given?

24 SENIOR STAFF COUNSEL MUNDSTOCK: During
25 construction and after construction is completed.

1 One of the things that the Compliance Unit does is
2 it processes these amendments from a variety of
3 applicants.

4 MS. LAGANA: So Mark would be processing
5 some kind of amendments? No. He's the Compliance
6 Manager, isn't he?

7 COMPLIANCE PROGRAM MANAGER NAJARIAN:
8 The Energy Commission, the normal process, after
9 certification is -- and the years we've been
10 permitting projects there are amendments. There
11 are changes. There are details to change,
12 situations change and the system is set up to
13 account for that, to account for that flexibility.

14 MS. LAGANA: So these kind of amendments
15 are being produced? I mean I know five amendments
16 were submitted at the end of the permit process,
17 during the last eight months, ten months -- five
18 amendments.

19 MR. RUBENSTEIN: If you're asking is
20 Calpine's situation normal --

21 MS. LAGANA: Yes.

22 MR. RUBENSTEIN: The answer would be no.
23 Calpine buying Enron's plant and then deciding
24 that they're going to take another look at certain
25 parts of the engineering, that's unusual.

1 MS. LAGANA: Okay.

2 MR. RUBENSTEIN: And so that's been
3 explained. I mean that's what happened here.

4 MS. LAGANA: Right.

5 MR. RUBENSTEIN: The traditional
6 powerplant that's built is built by the same
7 applicant that licenses it and they might sell it
8 much later. But Enron licensing the project and
9 immediately selling it to Calpine, triggered
10 Calpine --

11 MS. LAGANA: Under law it had to.

12 MR. RUBENSTEIN: I wasn't involved in
13 that, but that triggered Calpine's looking at the
14 project and coming up with their own, what they
15 believed, were better ideas. So that the quantity
16 of amendments at this stage certainly is greater
17 than would be for an average powerplant, because
18 an average powerplant would be built by the same
19 licensee that went through the original process,
20 so this is different.

21 MS. LAGANA: Gary, in your experience,
22 or, Mike, in your experience, would Calpine have
23 had to write up this kind of amendment after a
24 permit has been granted? And you have what, I
25 don't know, five, ten projects out there in the

1 last couple of years? All right, how many?

2 MR. RUBENSTEIN: No, it doesn't matter.

3 MS. LAGANA: Twenty-five?

4 MR. RUBENSTEIN: A lot.

5 MS. LAGANA: So in the 25 permits that
6 you've been given in the last couple of years --

7 MR. SOMMER: Those are not all Calpine
8 projects.

9 MS. LAGANA: I'm talking Calpine
10 seriously.

11 MR. SOMMER: Okay.

12 MS. LAGANA: Have you had to do
13 amendments -- on the Calpine ones?

14 MR. RUBENSTEIN: Yes. I would state
15 they're not --

16 MS. LAGANA: Is that ordinary or
17 extraordinary?

18 MR. RUBENSTEIN: I think doing
19 amendments after a project is approved, in my
20 experience, is ordinary. It's usual. They vary
21 in how large the changes are, and I don't mean in
22 terms of megawatts, but in terms of how
23 complicated they are.

24 MS. LAGANA: What I mean is the kind of
25 amendments that would have to come before a

1 workshop, before a commission, not something a
2 staff could say, oh, yeah, go ahead, no problem.

3 But I'm talking about an amendment that
4 would have to generate this kind of workshop.

5 MR. RUBENSTEIN: For the projects that
6 I've personally worked on, not just Calpine
7 projects, I have probably been to, on the average,
8 one workshop a year dealing with amendments like
9 this.

10 MS. LAGANA: That's not a lot.

11 MR. RUBENSTEIN: Well, it is if you
12 think of how many projects are actually under
13 construction in the state of California. There's
14 not a lot. Under construction, as opposed to in
15 the licensing process.

16 MS. LAGANA: Yeah.

17 MR. RUBENSTEIN: It's not something that
18 happens everyday, but, again, it's not uncommon.
19 And, as I said and I think as someone else said
20 too, this is a fairly complicated set of changes
21 compared to others that I've seen --

22 MS. LAGANA: Because of the buying --

23 MR. RUBENSTEIN: -- because of the
24 change of ownership, different engineering
25 philosophies and a desire to optimize the

1 performance of this plant.

2 SENIOR STAFF COUNSEL MUNDSTOCK: But
3 amendments are normal. I think that should be
4 stressed. Virtually every powerplant applicant
5 we've ever had at the Energy Commission, at one
6 time or another comes in with some amendments, so
7 there's nothing unusual to write amendments.

8 MS. LAGANA: Right, but I'm talking
9 about an amendment that would generate a workshop
10 like this, that would have to come before the
11 Commission. Not an amendment that would just be
12 the staff can approve it, it's no big deal.

13 SENIOR STAFF COUNSEL MUNDSTOCK:
14 Amendments that would require an analysis that
15 would not be automatically approved --

16 MS. LAGANA: Right.

17 SENIOR STAFF COUNSEL MUNDSTOCK: --
18 again, those would be fairly common for most
19 powerplants.

20 MS. LAGANA: Okay.

21 SENIOR STAFF COUNSEL MUNDSTOCK: Those
22 would be considered typical. We expect to get
23 some of them from most of the powerplants we
24 license.

25 MS. LAGANA: Okay, thank you.

1 COMPLIANCE PROJECT MANAGER SCOTT:

2 Paulette, most of the amendments that we process
3 are ones that do go before the Commission, not
4 necessarily with a workshop, because most of the
5 time the applicant wants to change something in
6 the condition and the staff can't change any
7 language in the condition. The Commissioners are
8 the ones who can do that.

9 So the majority of the petitions that
10 have been processed by staff and presented to the
11 Commission have been ones that involve changes to
12 conditions.

13 MS. LAGANA: Then if that's such a
14 routine matter why isn't this on the Internet?
15 Why isn't this available in public information? I
16 mean if I wasn't on this list I wouldn't have
17 gotten this. If I wasn't an intervenor I wouldn't
18 have gotten this information.

19 The ordinary citizens, people in my
20 neighborhood, they don't know anything about this
21 meeting. You didn't have to put it in the
22 newspaper. You didn't have to do anything, but
23 tell the people who are already interested in this
24 project. And if you can see there are over 50,000
25 people in this city, do you see 50,000 people

1 being represented here? Do you?

2 Do you know what I'm saying?

3 COMPLIANCE PROJECT MANAGER SCOTT: Yes,
4 I understand what you're saying.

5 MS. LAGANA: If you're going to have
6 this kind, that it generates this kind of workshop
7 and it's not on the Internet, it's not available
8 like that, it doesn't have to be publicly noted,
9 there's something wrong. And if it's a normal
10 process --

11 COMPLIANCE PROJECT MANAGER SCOTT: We
12 have a website that noticed this --

13 MS. LAGANA: It's not on the website.

14 COMPLIANCE PROJECT MANAGER SCOTT: --
15 this notice of certification, the notice of
16 receipt was on the website. I put on the staff
17 analysis and that is on the website now.

18 MS. LAGANA: This document is on the
19 website?

20 COMPLIANCE PROJECT MANAGER SCOTT:
21 That's on the website. I sent it to the web
22 master on the 17th.

23 MS. LAGANA: Of?

24 COMPLIANCE PROJECT MANAGER SCOTT:
25 November.

1 MS. LAGANA: But this was submitted in
2 May.

3 COMPLIANCE PROJECT MANAGER SCOTT: The
4 petition -- okay. We do not get an electronic
5 copy of the petition. We get hard copies like
6 this. That --

7 MS. LAGANA: Well, maybe we need to
8 change that.

9 COMPLIANCE PROJECT MANAGER SCOTT: Wait
10 a minute. That is the purpose of the notice of
11 receipt. We send it out and we put on the website
12 Calpine has submitted a petition. This is what
13 it's about. If you want a copy of the petition,
14 you want a copy of the analysis, you want to
15 participate in the process, that's on the website.
16 That's standard, which for every notice of receipt
17 that we send out, and the notice of the receipt is
18 on the website.

19 Okay, now, maybe our process of
20 notification needs to be changed. We'll take that
21 back to the Commissioners, but right now this is
22 all I have to work with.

23 MS. LAGANA: I understand that, Jeri,
24 and I appreciate that.

25 COMPLIANCE PROJECT MANAGER SCOTT: Okay.

1 But, and I see where you're coming from too.

2 MS. LAGANA: From our point of view --
3 thank you.

4 COMPLIANCE PROJECT MANAGER SCOTT: Yes,
5 I do. Thank you.

6 MR. BERTACCHI: Jeri, Calpine also put
7 out a newsletter to the Central Addition in late
8 September and we announced the date of this
9 workshop, that we'd be having this workshop.

10 MS. LAGANA: Is there anybody here who's
11 here from that notification?

12 MS. BLACKWOOD: Well, actually I got
13 notification through the CEC, but it was my
14 understanding that everybody who signed the
15 petition from the Central Addition Neighborhood
16 would be notified by mail about this, by the CEC,
17 and they weren't.

18 MR. TATAMER: I'd just like to support
19 Paulette. I know it seems like we all have
20 thankless jobs, no matter what we do. Again, as
21 an activist and someone who is concerned about my
22 family and everyone in this community, I feel that
23 you guys could do a better job. And I'm
24 addressing this really to the CEC.

25 We've been talking for many months. I

1 know that you've just received this, but, you
2 know, as Paulette has suggested, not only is there
3 a website, a medium, albeit, restricted to people
4 who have web access, which is a small percentage,
5 but there's newspapers. I know we've got members
6 of the press here now.

7 I'd like to see -- you know, and again,
8 I know this is not your responsibility, but I mean
9 there should be full-page ads running and there
10 should be two weeks, a month's notice so that we
11 really can get the turnout. There's television,
12 there's radio. I mean there's a lot of things
13 that could have been done that aren't.

14 MR. RUBENSTEIN: I'm ready to answer,
15 Mike, your question. Again, we're dealing with
16 apples and oranges here and this is a very -- this
17 is a simplification, but, the original amount of
18 offset credits that had to be provided for the
19 project, as it was originally approved for Enron,
20 was 412 tons per year.

21 The amount of credits that are required
22 for the project as we're proposing it now is 367
23 tons per year, 44 tons less. Which, of course,
24 raises the question that was asked earlier, if
25 it's so much less, why are we having to provide

1 more offset credits? And that gets back to the
2 apples and oranges problem.

3 In effect, we're having to provide 34
4 more tons of apples, but we're getting back 78
5 tons of oranges. So overall, on a tons basis,
6 there really is a net reduction, but because of
7 the accounting procedures that the Bay Area
8 district, the difference between the pollutants,
9 we're having to provide more credits for one type
10 of pollutant and get back, in exchange, a greater
11 volume of credits for another pollutant.

12 Does that answer your question?

13 MR. LENGYEL: Yes.

14 MR. RUBENSTEIN: Okay.

15 MR. MacDONALD: It was my intent to wait
16 until the end, but there seems to be some areas
17 that I think need clarification.

18 First of all, again, my name is Jim
19 MacDonald. I am representing C.A.R.E.

20 Air pollution credits are very easy to
21 explain. When they exceed the allowable emissions
22 they are required to buy offsets and these are
23 emission credits, and that's the basic fundamental
24 issue with the credits, is that they are, in fact,
25 exceeding state standards and are required to

1 clean up other communities, not our own, and using
2 facilities that have already closed and are no
3 longer producing pollution, resulting in a net
4 increase in pollution in the Pittsburg, Antioch,
5 Brentwood, Oakley, and several other miles past
6 that, even to Sacramento.

7 It was my intent and it still is my
8 intent to put in the record officially this
9 document. I've been told, and this is for the
10 record, that there is no written means of which
11 for me to officially put this into the record.
12 Nevertheless I am going to hand this to the
13 California Energy Commission. It is a letter from
14 C.A.R.E.

15 Basically what this letter is stating is
16 that the proceedings are not CEQA equivalent, that
17 this amendment is a piecemeal action by Calpine-
18 Bechtel and we're quoting some legal documentation
19 from Kings County Farm Bureau versus City of
20 Hanford. And there's some other documentation,
21 legal documentation here for the California Energy
22 Commission to look at.

23 Also for the individuals who are here,
24 this plant is required to have the best technology
25 available. It currently is not the best

1 technology available. There is SCONOX and, again,
2 we will be bringing information to the California
3 Energy Commission if, in fact, they allow it to be
4 put into the record.

5 And, again, for the public's
6 consumption, there's a good possibility that the
7 California Energy Commission, in fact, will not
8 allow this technology, the information on this
9 technology to be entered into the record at this
10 time. And they are not looking after your best
11 interests as far as the health and welfare of the
12 children of Pittsburg.

13 And again I want to hand you this
14 documentation for the record.

15 I think so far what I've heard C.A.R.E
16 has been of the position that many of the
17 calculations presented to the California Energy
18 Commission and done by the California Energy
19 Commission are miscalculations. If you go back
20 over the record, you will actually hear from some
21 of the people giving testimony that, in fact, that
22 their calculations have been not accurate in the
23 past and there's no reason to suspect that these
24 calculations continue to be accurate.

25 We do take exception to their 530

1 megawatt output of the current plant. We also
2 take exception to the fact that these increases,
3 these changes are only going to be a 29-megawatt
4 increase in power.

5 They didn't know that they had 30-
6 megawatts extra power until just recently.
7 There's no reason for anybody to believe that this
8 29 megawatts, that they're saying that they have
9 today won't turn into 100 megawatts, 150
10 megawatts, 200 megawatts.

11 So we are asking for additional written
12 information from Calpine-Bechtel and the
13 California Energy Commission. Specifically we
14 want vendors of the equipment that's being
15 supplied to Calpine-Bechtel and their
16 specifications so that independent engineers can
17 investigate the potential total output of these
18 changes. We believe that the amendments will have
19 much more potential than 29 megawatts.

20 We believe that the amendments have a
21 potential of at least 100 to 130 megawatts, which
22 would require a new AFC be done on the plant.

23 We've also looked at some of this
24 documentation. Again, we haven't had the time to
25 have experts in the field of endangered species

1 take a look at it, but we see no documentation on
2 the possible effects of endangered species in the
3 area. There's currently five or six endangered
4 species within the area.

5 We see no air pollution airborne
6 dropout. You can estimate 15 to 20 percent of the
7 airborne pollution ends up into the river supply,
8 affecting endangered species. We see no reports
9 on that type of pollution.

10 Again, we believe that this report
11 confirms our beliefs that the air modeling is
12 inaccurate. If you look at -- let me find the
13 page. If you look at page 13 in particular you
14 will see that the air pollution levels do not, in
15 fact, -- that the Calpine Pittsburgh air monitoring
16 station does not coincide with the air studies
17 that were done.

18 In fact, this graph proves what we have
19 been saying all along, that the information from
20 the Concord station and from the Bethel Island are
21 inaccurate, incorrect and should not be used in
22 air modeling and we're requesting that a complete
23 new air modeling be done of the entire region,
24 based on the new information that has been clearly
25 shown to differ from the air pollution information

1 that has already existed. And, again, that has
2 always been -- I'll frankly say a demand, that the
3 air pollution, the actual air pollution in the
4 Pittsburg area be monitored and used to determine
5 background levels.

6 And I think the other thing that the
7 audience and the California Energy Commission,
8 particularly the audience, needs to take into
9 account is that total tonnage really is no
10 indication whatsoever of the amount of toxins that
11 your family, particularly your children, will be
12 exposed to.

13 Very minute quantities of arsenic are
14 poisonous. You don't have to get into tons.
15 Glassfuls of water won't kill you, so what we
16 really need to be finding out is are they trading
17 glassfuls of water for glassfuls of arsenic. And
18 that is basically what C.A.R.E. has always
19 contended that the pollution levels that are being
20 permitted are basically being misrepresented.

21 That's all I have at this time. Thank
22 you.

23 MR. BACA: You get somebody new. My
24 name is Tom Baca. I'm with the International
25 Brotherhood of Boilermakers, local Lodge 549,

1 located at 2191 Piedmont Way, Pittsburg,
2 California. I am also a member of CURE and I just
3 wanted to make a clarification for the record.

4 I'm not sure what C.A.R.E. is. CURE is
5 Concerned Unions for Reliable Energy. And I just
6 want to make it plain that we support this
7 project. We've entered in a partnership with
8 Calpine. We're building plants in Yuba City.
9 We're building the plant at the Delta Energy
10 plant, also in Pittsburg. And I've dealt with
11 Mike Sommers personally. We've had a great
12 relationship.

13 Everything that we've got together on,
14 local hire, good paying jobs, union employees once
15 the plants are running, everything has come
16 through for us. We haven't had any problems. When
17 I went out to talk to Mike Sommers out at Kiewit,
18 on that project, the Los Medanos Energy Center,
19 he's been very responsive, receptive to any
20 concerns we've had, has addressed them.

21 And we had concerns going into this. We
22 addressed our concerns and so far we've had a
23 great relationship with Calpine and feel very
24 comfortable with them as part of this community.

25 Thank you.

1 MR. RUBENSTEIN: Jeri, would it be
2 possible or appropriate for me to respond to some
3 of the comments that were made earlier, or would
4 you rather wait until the end? I'd be happy to
5 wait.

6 COMPLIANCE PROJECT MANAGER SCOTT: Okay.
7 I'm just thinking that we have a full agenda to go
8 through here and I want to get everything covered.
9 But it's also very important that everybody's --
10 that's the purpose of this workshop is to make
11 sure that we answer your questions and address
12 your concerns.

13 So, I'm wondering if maybe, let's hold
14 off for that and maybe once we go through the
15 analysis that maybe some of the questions will be
16 answered. Is that okay?

17 MR. RUBENSTEIN: Okay.

18 COMPLIANCE PROJECT MANAGER SCOTT: Thank
19 you.

20 Why don't we move on to -- Mike and
21 Gary, you're finished?

22 MR. RUBENSTEIN: Yes, we are.

23 COMPLIANCE PROJECT MANAGER SCOTT: Okay.
24 Let's move on to Steve Baker and the generating
25 capacity.

1 SENIOR MECHANICAL ENGINEER BAKER: We
2 normally don't address generating capacity as
3 such. The only reason it's been brought up is
4 because I guess this gentleman or someone brought
5 it up as a potential issue in this amendment.

6 The Energy Commission does not license a
7 certain number of megawatts of electric capacity.
8 It licenses a facility that will produce no more
9 than a certain amount of environmental impacts.

10 Electric output, as such, is not an
11 adverse impact. It's not an environmental impact.
12 If additional generation should produce more
13 pollutants, then that would be an environmental
14 impact.

15 You've got Mr. Rubenstein here to
16 explain to you why that's not the case. Simply
17 the fact that the powerplant puts out more than
18 500 megawatts or more than 20 megawatts or more
19 than one kilowatt does not, of itself, mean
20 anything here. It's insignificant.

21 As far as the contention that a new
22 licensing process is required because the
23 amendment is larger than 50 megawatts, that's not
24 true. The Commission did not license a project
25 that was to put out only 500 megawatts.

1 The Commission licensed, originally
2 Enron, to install X equipment at Y site and when
3 that equipment is turned on and operated, it will
4 put out a certain amount of electricity. That
5 amount of electricity was not an inherent factor
6 in the licensing. The licensing process looked at
7 the environmental impacts that would result when
8 that equipment was installed and operated and
9 that's all been handled elsewhere.

10 So the generating capacity itself is not
11 an impact and it's really not an issue here.

12 We look to see when we license a
13 powerplant, the Energy Commission looks to see
14 that the project will comply with all applicable
15 laws. They do not look to see that it is an
16 optimum design.

17 When you build a project such as this,
18 that costs nearly half a billion dollars and
19 that's with a b, you don't sit down and do all the
20 final design first and then go get a license for
21 it. You can't afford that.

22 The engineering and design alone costs
23 millions of dollars. Now venture capitalists
24 don't put up that kind of money unless there's a
25 license on the table. So what occurs is the

1 developer hires an engineer to do a preliminary
2 design and the preliminary design, in some cases
3 is rough.

4 Where the preliminary design is relied
5 upon to calculate adverse impacts, such as air
6 pollution, they're all calculated at the worst
7 possible case. So that when the project is
8 actually built it will produce no more than the
9 permitted amount of pollutants or other impacts.

10 The design that goes through the
11 licensing process is a preliminary design. After
12 the license has been granted then the developer
13 can go out to the investment community and borrow
14 the half a billion dollars necessary to purchase
15 the equipment, install it and operate it.

16 When you get your license, the first
17 thing you do is you turn your engineers loose on
18 doing the detailed design of the project. In many
19 cases the engineer that does the detail design
20 will be the same engineering company that did the
21 preliminary design. That's not necessarily so.

22 Every developer I've been familiar with
23 in my 26 years in the power industry has gone out
24 and hired an engineer to do the preliminary design
25 and then has gone out for bids to hire an engineer

1 to do the final design. In some cases the first
2 company gets the bid and in other cases they
3 don't.

4 I've seen several projects where the
5 final design is done by a different engineering
6 company than the first. And believe me,
7 engineering companies are not identical. Company
8 A may design a plant like this. Company B will
9 prefer to design a plant like this. They'll be
10 very similar, but they'll be different.

11 If you hire Company A to do your
12 preliminary design and Company B to do your final
13 design, Company B will want to make some changes
14 to that preliminary design. It's normal. It
15 happens all the time. Nothing that unusual has
16 happened in this case.

17 The magnitude of the changes were
18 greater. I can tell you, from my personal
19 knowledge, which is not part of the project
20 record, but I'm just saying here tonight, I know
21 that Enron, when they went through our licensing
22 process, did not intend to continue to own and
23 operate the plant. Their intention was to sell it
24 long before the license was granted, long before.

25 As such, they may, now I can't be

1 certain of this, but they may have been less than
2 fully diligent in doing their preliminary design.
3 Maybe not, I don't know. But the thing that
4 concerns us here, are the improvements that
5 Calpine proposes to make such that it would
6 require a new licensing process? And the answer
7 to that is no.

8 The project that was originally licensed
9 by Enron was to install X turbine generators at Y
10 site and operate them and that's what's going to
11 happen. The same machines that were licensed will
12 be installed at the same site and when they're
13 turned on and operated they'll produce some number
14 of megawatts. Maybe it will be 530, maybe it will
15 be more, maybe it will be less.

16 If the amendment goes through maybe it
17 will be 459 megawatts, maybe more, maybe less. We
18 don't know. Large powerplants like this are not
19 made by the millions, they don't flow off an
20 assemblyline like cars in a Detroit assembly
21 plant.

22 When Ford or General Motors or Chrysler
23 comes out with a new car, they go to the Federal
24 EPA and they bring samples and the EPA tests the
25 cars for emissions to see how much pollutants come

1 out the exhaust pipe. They'll test several cars
2 and when the design is appropriate the EPA will
3 bless that particular model.

4 They'll say, okay, Chrysler, you can
5 build as many of this car as you want with this
6 engine and all these smog controls on it and we
7 know that they'll all meet the requirements.

8 So Chrysler pushes the button and these
9 cars flow off the line, several hundred a day.
10 There will be variations, but in general, when you
11 build millions of units like that, all of them
12 essentially identical, they all put out pretty
13 much the same output, the same power, the same
14 pollution.

15 Large powerplants, such as we're talking
16 about here, they're not built by the millions.
17 They're not even built by the hundreds. And in
18 California right now there are only four in
19 construction. This is one of them. The Delta
20 project is the other. Congratulations, you've got
21 half of California's powerplants in your backyard.

22 MS. LAGANA: That's the issue. Actually
23 we have three.

24 SENIOR MECHANICAL ENGINEER BAKER: Not
25 yet. Anyway, what I'm saying is that we don't

1 know it -- because we don't build these by the
2 millions, we don't know until this plant is
3 actually turned on and operated and we don't know
4 exactly how much power it's going to produce. It
5 will be somewhere around 530 megawatts, but the
6 Energy Commission didn't care when it went through
7 the licensing process, because we're not here to
8 license the exact number of megawatts. We're here
9 to license the environmental impacts created when
10 those megawatts are generated and that's what
11 we've done.

12 We've put strict limits on the impacts
13 that can be created by this powerplant. Air
14 pollution, noise, odor, visual degradation,
15 everything has been covered. It's all had limits
16 put on it. The project is not allowed to put out
17 any more impacts than were in the Energy
18 Commission's license.

19 The license doesn't say anything about a
20 limit on megawatts. And again, as you can see in
21 my analysis, the proposed increase in megawatts is
22 less than 50, so, therefore, the amendment process
23 is appropriate.

24 MS. LAGANA: Given that the website and
25 all of the documentation that's come out regarding

1 this powerplant has described it as a 500-megawatt
2 powerplant and to light has come that, truly, with
3 this kind of capacity in terms of the way it was
4 permitted the capacity is truly 530, is that
5 correct?

6 SENIOR MECHANICAL ENGINEER BAKER: In
7 this particular case, yes. Again, these
8 powerplants are all unique. Every one is a little
9 different from every other one. Even ones that
10 use the same gas turbine generators from the same
11 manufacturer. The rest of the project is not
12 identical. There will be some differences.

13 MS. LAGANA: So it's a 30-megawatt
14 difference?

15 SENIOR MECHANICAL ENGINEER BAKER: No,
16 no. Let me talk again for a couple of minutes and
17 then continue, but let me interrupt you.

18 The farther along in the design and
19 construction and operation process you are the
20 more you can predict the electrical output of the
21 plant with accuracy and certainty. When you first
22 come up with the preliminary design you don't
23 accurately or with a lot of certainty know how
24 much power it's going to produce.

25 That number is based on the preliminary

1 selection of the equipment. You know, are you
2 going to buy Westinghouse or General Electric or
3 let's say a Brown and Ferry. It's based on
4 standard -- experience with similar designs in the
5 past.

6 Okay, Calpine has built plants before.
7 None of them were exactly the same as this one.
8 This is a cogeneration plant. Some of the energy
9 created in the plant goes to Tosco. Not all of it
10 goes into the electric power grid.

11 MS. LAGANA: That's steam that's going
12 to Tosco?

13 SENIOR MECHANICAL ENGINEER BAKER: Yes.
14 So that makes it a little different from other
15 plants they have built, which are not
16 cogeneration, where all the steam, in fact, is
17 turned into electricity. So there's a difference
18 there. Before the plant is built we can only
19 estimate the actual output.

20 Another thing, say they decide, you
21 know, during the process, okay, we're going to
22 buy, for example, General Electric gas turbine
23 generators and a General Electric steam turbine
24 generator. Okay, we're going to buy these models.
25 Okay, fine.

1 Well, when this particular turbine first
2 came out on the market General Electric said it's
3 240 megawatts. Well, okay, if you put two of them
4 together that's 480. So if this plant had been
5 proposed a couple of years earlier it would have
6 been proposed as a 480-megawatt project.

7 As time goes on General Electric learned
8 things about their turbines. These are new
9 machines. The first one in California was
10 operating at the C and H Sugar Refinery in
11 Crockett. That was the first G. E. 7F gas
12 turbine. That was one that came off the skids
13 rated at 240 megawatts. It's putting out more
14 than that today.

15 The manufacturer comes out with a new
16 machine, and again, these are new. There aren't
17 that many of these machines in use and they
18 haven't been on the ground for that long.

19 They came out with a new machine and
20 they wanted to rate it conservatively. Okay. G.
21 E. isn't going to say, here, I'll sell you this
22 gas turbine. It's 300 megawatts and you buy it
23 and you put it on the ground and you plug it in
24 and it puts out 250. There's a big lawsuit coming
25 there.

1 The manufacturers don't overrate their
2 machines, they'll underrate them. Okay. We'll
3 sell you a 240-megawatt machine, hoping that it
4 will put out at least that and certain that it
5 will.

6 As the manufacturer gains experience
7 with these machines, as they sell them, as people
8 buy them and put them in their powerplants, start
9 up the powerplants and operate them, G. E. looks
10 over their shoulder, "Golly, that thing puts out
11 more than 240 megawatts. It's putting out 250,
12 maybe 260. That's pretty good. Here's another
13 one over here. This is working and it's putting
14 out 257 megawatts."

15 As the manufacturer gets more experience
16 with its new machine, as more of these machines
17 are on the market and being used, the manufacturer
18 will increase the ratings. Then, as they're
19 learning more about these machines that they're
20 creating, the manufacturers will go back and
21 they'll tweak them.

22 They'll say, "Gee, if we change the
23 pitch or the shape of this row of blades in the
24 compressor, we'll get a little more efficiency, a
25 little bit more power. If we make a little change

1 here in a combustor transition duct, we can get a
2 little bit more efficiency and power out of it and
3 a little bit lower emissions, and by golly, we can
4 put another row of blades in the front of that
5 compressor and this thing is really going to go."

6 They make changes like this. So the
7 same machine that was originally 240 megawatts,
8 now maybe it's rated at 260. As the machines come
9 off the line and are put in place, people are
10 learning how to use them differently. The first
11 machines of this type that came out were not steam
12 injected. Now they offer steam injection, because
13 the manufacturers have learned that, gee, we can
14 put steam in here and it works even better, son of
15 a gun.

16 As far as duct burning, some plants need
17 duct burning and some don't. A cogeneration plant
18 is a prime candidate for a duct burner, because so
19 much of the heat that comes in, that's captured --
20 you know, otherwise wasted heat -- so much of this
21 heat that's captured from the gas turbine exhaust
22 is going to be used to feed the steam host, Tosco,
23 that it's a natural to want to put a duct burner
24 in there to make up some more so that you can run
25 that steam turbine generator at its maximum. And,

1 again, this only on hot days. You won't need that
2 duct burner, you won't want to use it, you can't
3 use it on cold days.

4 So, there's all these different factors
5 that go into the mix, but nobody knows for certain
6 until that thing out there is actually built and
7 turned on and started up and has finished its
8 initial tests, no one will know how many megawatts
9 it's capable of producing. And we understand
10 that. And that's why the exact megawatt output is
11 not a factor in the licensing process.

12 MS. LAGANA: Then why would you put a
13 50-megawatt line in the sand and say if it's
14 over -- I mean why don't you put a hundred?

15 SENIOR STAFF COUNSEL MUNDSTOCK: Let me
16 try the legal. Okay, you've heard the engineer
17 explain --

18 (Laughter.)

19 SENIOR STAFF COUNSEL MUNDSTOCK: The
20 thing to understand is some numbers have legal
21 significance --

22 MS. LAGANA: Have you been to Florida?

23 (Laughter.)

24 SENIOR STAFF COUNSEL MUNDSTOCK: It was
25 a long time ago.

1 MS. LAGANA: Are you counting megawatts
2 like they're counting votes?

3 SENIOR STAFF COUNSEL MUNDSTOCK: It was
4 a long time ago that I was in Florida and I didn't
5 try to vote there.

6 (Laughter.)

7 SENIOR STAFF COUNSEL MUNDSTOCK: The
8 point is that the 500-megawatt number is a nice
9 handy comfortable placeholder that everybody seems
10 to want to use for this project. The applicant
11 started using it, the Energy Commission used it at
12 times. It has absolutely no legal significance
13 whatsoever. It's more than 100 megawatts and
14 that's it.

15 In the decision, a lot of people have
16 thought we licensed a 500-megawatt plant. Well,
17 we did not, that number is not a legal number,
18 it's not a limit. The decision I went through
19 carefully and found the decision describes this
20 project as having the following megawatts, all of
21 which are approximations and guesses for the
22 reasons that Steven explained in engineering
23 terms. It is described on different pages. 500
24 megawatts, 518 megawatts, 520 megawatts, 510
25 megawatts and in Steven's best analysis 529.9

1 megawatts.

2 So those were the numbers used, because
3 we didn't know any megawatts and it didn't matter.

4 MS. LAGANA: It only mattered because of
5 the generating materials?

6 SENIOR STAFF COUNSEL MUNDSTOCK: No,
7 what matters to us today here, for this amendment,
8 does the amendment add a number of legal
9 significance, which would be 50 or above.

10 MS. LAGANA: It does.

11 SENIOR STAFF COUNSEL MUNDSTOCK: Okay,
12 see that's the point. If you look at Steven's
13 analysis, what they're changing, what they're
14 adding is the machines they've rearranged and
15 added -- it's a question of what does that do?
16 How many megawatts have they actually added to
17 what they started with?

18 And what they started with is this
19 approximation number. You can't use 500, because
20 that's a phony number. All those numbers -- you
21 have to use a more realistic number, it's not just
22 something that was used.

23 MS. LAGANA: So is 29 megawatts a phony
24 number?

25 SENIOR STAFF COUNSEL MUNDSTOCK: No, 29

1 is his analysis, but that's under 50. See, if the
2 increase, if all of their juggling produced an
3 increase of 50 megawatts or more they would be in
4 big trouble, because that's a legal number, the
5 increase of 50 megawatts.

6 MR. MacDONALD: But they're saying that
7 they are.

8 SENIOR STAFF COUNSEL MUNDSTOCK: But see
9 they're not.

10 Now, Steve's analysis, which if you have
11 the staff analysis, you see what he has
12 concluded --

13 MS. LAGANA: I'm looking in front of me
14 here --

15 SENIOR STAFF COUNSEL MUNDSTOCK: -- that
16 the increase is 29 or 17 megawatts, depending on
17 the temperature calculation, which is how the
18 engineers look at different ways the plant
19 operates. Both 29 and 17 are well under 50.
20 Therefore, the legal number isn't even approached.

21 MS. LAGANA: Okay.

22 SENIOR STAFF COUNSEL MUNDSTOCK:
23 Therefore there is not the problem that has been
24 assumed, based upon reliance upon the fictitious
25 500 megawatt number and its other fictitious

1 running mates, because that's not the number that
2 counts.

3 The number that counts is the increase.
4 And if it was -- if Steve found that their
5 increase was 50 megawatts or more we wouldn't be
6 here, because this is a matter that would have
7 probably been kicked out when received.

8 MS. LAGANA: Depending on the technology
9 that they're going to use, right? Isn't that what
10 you're saying that if they use G. E. as opposed to
11 Westinghouse --

12 SENIOR MECHANICAL ENGINEER BAKER: But
13 the Energy Commission licensed a project that will
14 use this certain gas turbine generator, this
15 certain steam turbine generator, and that is what
16 they will install. They will install the machines
17 that the Energy Commission licensed them to
18 install.

19 They won't go out and shop around for
20 something different. It's already been determined
21 what they want to put in. The Energy Commission
22 analyzed the environmental impacts from that
23 machine and said, yes, you can build it, and
24 they're building exactly that machine.

25 Now that machine may put out more than

1 500 megawatts. It probably will. If it doesn't,
2 General Electric is going to have a real problem,
3 they're going to have to pay a lot of liquidated
4 damages. But the 500-megawatt figure was only a
5 nominal figure. It was only a handle. You could
6 pick the project up by the 500-megawatt handle and
7 waive it around and say, this isn't a 250-megawatt
8 plant, this isn't a 750-megawatt plant. It's a
9 500-megawatt plant.

10 COMPLIANCE PROJECT MANAGER SCOTT: I
11 just want to state that we're getting pretty close
12 to nine o'clock and we want to go through all of
13 this, so I want to speed it up a little bit. I
14 want to hear your questions, but can we move a
15 little faster.

16 MR. MacDONALD: I want the actual
17 calculations of what the amendments will increase
18 the output, because our argument was that it was a
19 500-megawatt plant and that what they told us was
20 that this plant, with its amendment would put out
21 559. Okay, that's what they said that this plant
22 would -- we said it was a 500-megawatt and they
23 said, no, this plant's going to put out 59 more
24 megawatts over 500. But we're not over the 50
25 limit, because we're actually a 530, and that's

1 where these numbers on page five originally came.

2 So they have said in the past that,
3 yeah, we are putting out 59 more megawatts than
4 the 500-megawatt plant. These amendments will
5 actually equal up to 59 megawatts, but that
6 doesn't make any difference, because we're not a
7 500-megawatt, we're a 530-megawatt plant, so
8 that's only a 29 megawatt plant higher.

9 And your legal question is very valid
10 and very important because the reason these people
11 are fighting is because SCONOX is exceptionally
12 clean. Okay, but it will cost them \$250 million
13 to put the SCONOX in. It will cost them \$250
14 million to protect the health and welfare of the
15 children of Pittsburgh. It will actually create
16 more jobs putting this technology in place, more
17 union jobs.

18 So I agree with that. We want jobs, but
19 we also want clean and why should we allow
20 Calpine-Bechtel to pollute the air, when there's a
21 technology available that's only going to cost
22 them 200. And you have to remember, these people
23 are making billions of dollars over the lifetime
24 of this thing.

25 So I want this Commission to come up

1 with -- we want to know the actual increase in
2 megawatts of these amendments, because they
3 clearly told us that this 59 megawatts would be
4 because of the amendments. But it wasn't a
5 problem, because it was a 530-megawatt plant to
6 begin with.

7 SENIOR MECHANICAL ENGINEER BAKER: Thank
8 you.

9 MR. SOMMER: The heat balances that show
10 the output of the plant for both the original
11 plant design and the current plant design have
12 been submitted to the Energy Commission in a
13 response to a data request, I believe it was
14 number eight, Steve?

15 SENIOR MECHANICAL ENGINEER BAKER: Yes.

16 MR. SOMMER: So that information is part
17 of the public record. The heat balance is the
18 method that's used to determine what a powerplant
19 output is, that's part of the public record.

20 SENIOR MECHANICAL ENGINEER BAKER: That
21 document was from Ellison and Schneider, attorneys
22 for Calpine. It was dated August 21st, 2000 and
23 it was docketed at the Energy Commission on August
24 25th, 2000. It's public record.

25 COMPLIANCE PROJECT MANAGER SCOTT: Okay.

1 MR. MAY: Yeah, real fast. I'm Glenn
2 May, the reporter with the Ledger and the Times
3 here. I normally don't enter the public record
4 like this, but just for the panel of people here,
5 I thought it'd be the easiest way to ask a
6 question.

7 I'm having a little trouble with those
8 numbers. Everywhere I saw it was described as 500
9 and it just leads me to the question of with the
10 Delta plant being listed as 880, my question is
11 that an accurate figure or not? Is it actually
12 greater than that? And if that is the accurate
13 figure for that plant how come it's known with
14 certainty there, but not with the Los Medanos
15 Plant?

16 SENIOR MECHANICAL ENGINEER BAKER: The
17 answer is that, as with this project, that 880
18 figure for Delta is again a nominal number. And
19 the Energy Commission has not concerned itself
20 with the exact number of megawatts that will be
21 generated, because that's not required.

22 What is required is that we analyze the
23 environmental impacts from this nominal 880-
24 megawatt powerplant.

25 SENIOR STAFF COUNSEL MUNDSTOCK: Right.

1 I'd second that. Probably none of the numbers
2 being used in most of the newspaper reports and
3 the Energy Commission's website and applicant's
4 submittals are anything other than approximations
5 of megawatts and probably most of them are too
6 low. And that the actual output when the thing is
7 run is going to be higher and it doesn't make any
8 legal difference, because those aren't legal
9 numbers.

10 SENIOR MECHANICAL ENGINEER BAKER: And
11 remember megawatts are not environmental impacts.

12 MR. BERTACCHI: I think it might be
13 helpful to talk about apples and oranges, because
14 that's kind of what gets lost here too. Turbines
15 are very dependent on temperature for what the
16 output is of the turbine and so if you take the
17 existing plant, as it was designed, and that's
18 what we're installing, the same steam turbine, the
19 same combustion turbines, and you looked at a
20 specific temperature, it would have an output and
21 you could pick any temperature and that output
22 might be slightly different.

23 For instance, if I pick 60 degrees, the
24 existing plant, as it was, and I came up with the
25 output it might say, I don't know, 512 megawatts.

1 But if you looked at what we're adding for duct
2 firing and looked at what the incremental output
3 where it's increased from that point, it is the
4 smaller number. It's nowhere near 50 megawatts.
5 That's the point of apples and oranges.

6 SENIOR STAFF COUNSEL MUNDSTOCK: Yeah,
7 but this is typical that the numbers will -- the
8 numbers that a plant might actually operate on
9 versus the number that might be used for the short
10 handle in the lists in the articles, those are
11 going to differ pretty much across the board.

12 I mean in the powerplant I'm working on
13 it was called a nominal 500 and because of the
14 issue raised here we asked the applicant what
15 might be the higher number it would actually run
16 at and we were given a number about 60 or 70
17 megawatts higher.

18 And so the fact is that these are
19 approximate numbers. There's nothing unusual
20 about that. Now only the engineers may understand
21 it and it actually hasn't been talked about until
22 this situation came up, but it was a comfortable
23 matter, because it had no consequences.

24 MR. RUBENSTEIN: But I think it's
25 important to emphasize that, for all this talk

1 about the approximation of the megawatts, the
2 thing that's absolute is the environmental
3 impacts. Those emission limits are specified.
4 This plant, when it was licensed, had 58
5 conditions, limiting its air emissions, and those
6 are what really govern.

7 And if an applicant can generate 30
8 megawatts more and still satisfy those 58
9 conditions, that means there is no change to the
10 environmental.

11 SENIOR STAFF COUNSEL MUNDSTOCK: None of
12 those conditions are legally tied to megawatts.
13 There is no legal environmental impact from a
14 megawatt.

15 MR. BERTACCHI: And beyond that it's not
16 just a legal differentiation, there's no practical
17 link between the megawatts and the impacts. A
18 powerplant putting out much fewer megawatts could
19 easily spew much more pollution.

20 SENIOR STAFF COUNSEL MUNDSTOCK: As is
21 the case. And the dirtiest powerplants are the
22 smaller ones that produce less megawatts and have
23 much older pollution control material or none and
24 they're going to be the filthiest plants.

25 FROM THE AUDIENCE: Is that because of

1 the older technology?

2 SENIOR STAFF COUNSEL MUNDSTOCK: Yes,
3 but there's likely to be a correlation in many
4 cases.

5 COMPLIANCE PROJECT MANAGER SCOTT: Okay,
6 there's a --

7 MR. MAY: Just to finish up, so we don't
8 really know what the actual output of the Delta
9 plant is then?

10 MR. RUBENSTEIN: We do. We know that it
11 is approximately 880 megawatts.

12 MR. SOMMER: And we know absolutely what
13 the emissions will be limited to.

14 SENIOR MECHANICAL ENGINEER BAKER: And
15 as with the Los Medanos facility we won't know
16 exactly how many megawatts it can put out until
17 it's turned on. We can calculate a number now,
18 just as we calculated numbers for Los Medanos, but
19 until the plant is actually operated we don't know
20 what that number will be. But it doesn't matter.

21 MS. LAGANA: Is that why the grid's in
22 such a mess?

23 COMPLIANCE PROJECT MANAGER SCOTT:
24 There's a change in the agenda. We're going to
25 ask Guido Franco to present his summary on his

1 analysis on air quality and then we'll do public
2 health.

3 Thank you. Mr. Baker had to leave.

4 SENIOR MECHANICAL ENGINEER BAKER: No,
5 I'll stick around.

6 COMPLIANCE PROJECT MANAGER SCOTT:
7 You'll stick around. Thanks.

8 MR. FRANCO: My name is Guido Franco.
9 I'm the air quality engineer. I did the air
10 quality analysis for this amendment. I'm going to
11 shorten my presentation as much as possible, but
12 the outline of my presentation is the following.

13 I want to start with a brief description
14 of the proposed changes. After that I will give a
15 presentation about the regulatory analysis done by
16 the air quality management district. I will talk
17 a little bit about the air quality impacts. And
18 again, I will indicate our preliminary conclusions
19 and recommendations.

20 I think that we have to understand that
21 this is a draft analysis. We have been hearing a
22 lot of comments at this workshop and we will
23 incorporate -- we'll try to raise those comments
24 in our final analysis.

25 With respect to the proposed changes in

1 permit conditions, this is a summary, for example,
2 of just for NOX, nitrogen oxides, the startup
3 conditions in the existing condition of
4 certification is 223 pounds per hour. The new
5 conditions will be 240 pounds per startup.

6 It means that -- the startups usually
7 take like two or three hours, so it means that the
8 total amount of emissions per startup will be 240.
9 However, because there is not an hourly limitation
10 in the amount of pollution that will be in the
11 startup in the new conditions, we assume the worst
12 case condition, that is that all the emissions
13 occurred during the first hour. That's why we
14 assume an emission level of 240 pounds per hour.

15 The numbers with blue, in blue, are a
16 situation in which the actual emissions go down.
17 So, for example, during normal operations, the
18 existing permitted conditions is 16.3 pounds per
19 hour, the new permit conditions will be 13 pounds
20 per hour.

21 MS. LAGANA: Why isn't carbon monoxide
22 in here?

23 MR. FRANCO: Excuse me?

24 MS. LAGANA: Why isn't carbon monoxide
25 increases noted in here?

1 MR. FRANCO: I said this is a partial
2 list. The entire list of pollutants is included
3 in the analysis. This is --

4 MS. LAGANA: There's a significant
5 increase in the carbon monoxide stats. It goes
6 from 1821 to 2514. That's a significant increase.

7 MR. FRANCO: It's a significant increase
8 and we analyzed the increase to see if there would
9 be a significant impact and that's part of the
10 analysis.

11 MS. LAGANA: What I'm saying is that I
12 think this needs to reflect carbon monoxide --

13 MR. FRANCO: I'm not trying to hide
14 anything. All the numbers are in the analysis.
15 What I'm trying to do here is to provide a summary
16 of the analysis.

17 With respect to -- I mean emissions for
18 the entire facility, NOX will go up from 1,190
19 pounds per day to 1,342. However, we have to
20 understand that these are permitted levels. It
21 means there are emissions that cannot be exceeded.
22 The actual emissions have to be equal or lower
23 than the emissions included in the permit
24 conditions.

25 What I will do in my final analysis is I

1 will show you some historical data showing
2 actually what the powerplant typically meets
3 during the day with respect to the permitted
4 levels. I hope you will see that the actual
5 emissions in practice are much lower than the
6 permitted levels.

7 What I'm trying to say is that there is
8 a distinction between permitted levels and actual
9 emissions. Permitted levels are emission levels
10 that cannot be exceeded and usually the actual
11 emissions are much lower than the permitted
12 levels.

13 Again, in blue we have the emissions for
14 which the limitations or the permitted levels go
15 down.

16 With respect to the analysis done for
17 the district, they concluded that the amendment
18 complies with all the district's rules and
19 regulations. And they said the analysis that we
20 performed by the district. And, again, if you
21 would like to get a copy of the analysis we will
22 make sure that you get a copy of the analysis.

23 However because there are going to be
24 some increases in permitted levels again,
25 permitted levels, the applicant will have to

1 provide additional offsets. And the amount of
2 offsets for NOX is 25.88 tons per year, for PM10
3 it is eight tons per year.

4 The applicant would have to surrender
5 the offsets that were generated from a shutdown of
6 a facility in Antioch. I don't want to take too
7 much of your time, but the emission reduction
8 credits are part of the overall strategy used by
9 the air quality management district to reduce
10 pollution at the local and at the original level.

11 In my original analysis I presented -- I
12 mean, in my original analysis, what I did for the
13 original application for this powerplant, what I
14 did was to show an historical trend of ambient air
15 quality in this region. And what I will do in the
16 final analysis, for your information, is to again
17 present that figure and that information in the
18 final analysis.

19 And you will see that there has been a
20 trend to lower and lower ambient concentrations in
21 this area. And I will, since that information was
22 requested, I will make sure that will be included
23 in the final analysis.

24 With respect to the air quality impacts,
25 again, what we did was to -- I mean the applicant

1 performed an analysis, the Bay Area reviewed the
2 analysis and they did all analysis and we reviewed
3 both analyses. What I'm presenting here is just a
4 very brief summary, but the NO2 impacts are lower
5 than the ambient air quality standard.

6 So even if we include the background,
7 the existing worst case background in this area,
8 and we add the worst case potential impact for
9 this powerplant, total emissions -- I mean the
10 total emissions, including the amendment, what we
11 found out is that the NO2 impacts will be much
12 lower than the ambient air quality standards.

13 Again, this is worse case analysis and
14 even under the worst case analysis we still --

15 FROM THE AUDIENCE: How much lower?
16 What's the percentage? And what model were you
17 using to come up with that scenario.

18 MR. FRANCO: We used the industrial
19 source complex model. That is a model that is
20 approved by the Environmental Protection Agency
21 and the Air Resources Board for this type of
22 analysis. And again, we did something that -- we
23 do it to make sure that there is not a potential
24 of significant impacts.

25 What we do is to take the worst case

1 measured ambient concentrations in the area, that
2 may happen, for example, in November, one hour in
3 November and we add to that the worst case
4 estimated impacts, the incremental impacts, due to
5 the powerplant, that may happen in July or may
6 happen in January, and we're adding up, even
7 though they are not physically possible, but just
8 to have a worst case estimation with impacts, we
9 add them up and we compare them to the ambient air
10 quality standards.

11 MS. LAGANA: Are you referring to page
12 16 in your document?

13 MR. FRANCO: Yeah, the NO2 impacts, the
14 total impacts will be 399 micrograms per cubic
15 meter. And the most stringent ambient air quality
16 standard is 470 micrograms per cubic meter. But,
17 again, this 399 is an unrealistic worst case
18 estimation of total impacts.

19 MS. LAGANA: Okay. On page 16, the
20 first sentence is, "The NOX maximum background
21 concentrations measures in Pittsburg and Bethel
22 Island, meaning the monitoring station, from 1995
23 to 1997 should conservatively represent the worst
24 case impacts," right?

25 MR. FRANCO: Uh-huh. Why?

1 MS. LAGANA: I'll tell you why. Bethel
2 Island in 1995 -- in 1995 Bethel Island did not
3 have a full blown air monitoring station because
4 in 1995 we still had an air monitoring station in
5 Antioch, the one that got flooded in 1996 and had
6 to be taken away. When that was flooded in 1996
7 that equipment went to Bethel Island, completing
8 Bethel Island in meteorology and in criteria
9 pollutants and in ambient -- I mean the other
10 measurement of pollutants. Okay?

11 Pittsburg did not have a full blown air
12 monitoring station until Calpine upgraded it last
13 year. So they didn't have -- they had
14 meteorology, but they didn't have -- what did you
15 increase?

16 MR. RUBENSTEIN: Yeah, they did. All we
17 did is we added PM10.

18 MS. LAGANA: You added PM10.

19 MR. RUBENSTEIN: But they still had NO2
20 there.

21 MS. LAGANA: Well, they had NO2, but
22 they didn't have PM10, because I'm going to get to
23 the other thing on --

24 MR. FRANCO: But let's talk first --

25 MS. LAGANA: So Pittsburg had it there

1 and then so the third way that you got, because
2 they always take three monitoring stations to get
3 this impact. Are you saying that you only took
4 Pittsburg and Bethel Island for this year's, for
5 1995 through 1997?

6 MR. FRANCO: Yes.

7 MS. LAGANA: So then you didn't ask
8 Concord?

9 MR. FRANCO: Because it's not
10 applicable.

11 MS. LAGANA: Good. Okay. Well, my
12 feeling is that and my understanding is that
13 Pittsburg did -- that the air monitoring station
14 that was in Antioch completed the air monitoring
15 station that was in Bethel Island after Antioch
16 shut down. And that's the one that Calpine
17 replaced last year.

18 MR. FRANCO: No, that's a different
19 monitoring station. That was for PM, for
20 particulate matter. It wasn't for NO2.

21 MS. LAGANA: The air monitoring station
22 in Antioch?

23 MR. FRANCO: The one that Calpine
24 installed, it was for --

25 MS. LAGANA: Last year, what you are

1 calling the Calpine --

2 MR. FRANCO: It was only to measure
3 particulate matter.

4 MS. LAGANA: No, your monitoring
5 station, the new one that was installed is
6 meteorological and criteria pollutants and PM10.
7 It's the full blown monitoring station, that was
8 my understanding of it.

9 MR. FRANCO: No, the air quality
10 condition, AQ58 and it's in the --

11 MS. LAGANA: It's AQ58.

12 MR. FRANCO: It's very clear there that
13 they only were required to install a monitoring
14 station for particulate matter.

15 MS. LAGANA: But the whole route, they
16 even did meteorological

17 MR. FRANCO: They did meteorology and
18 they did PM, but as far as we know, they don't
19 have NO2 data. I will check with them again, but
20 I'm pretty sure that they didn't install any
21 NO2 --

22 MS. LAGANA: Mark, you're the compliance
23 manager and you're supposed to be getting --

24 COMPLIANCE PROGRAM MANAGER NAJARIAN: My
25 name is Chuck --

1 MS. LAGANA: I'm sorry, Chuck, thank
2 you. You're the compliance manager and I
3 understand that you get a monthly report from this
4 monitoring station. Does it have NOX or not?

5 MR. FRANCO: We do get -- I mean --
6 because I review the data that they send us every
7 month and they don't -- I mean they send us the
8 data in electronic form and in hard copy and they
9 don't present any NO2 information.

10 MR. SOMMER: Paulette, the monitoring
11 station that's currently in service is outside the
12 powerplant boundaries and it was installed to
13 measure particulate.

14 MS. LAGANA: Particulate and
15 meteorological.

16 MR. SOMMER: And meteorological. The
17 powerplants themselves will have continuous
18 emissions monitoring systems for each emission's
19 source that will record NOX and co and those will
20 have monthly and annual reports and source testing
21 done on those monitors. But the monitor that
22 you're referring to that's currently in service is
23 not associated with the plants, because the plants
24 aren't operating. It's an additional over and
25 above the requirements of the air district and the

1 CEC and it measures a PM10 --

2 MS. LAGANA: And meteorology only, not
3 -- it doesn't measure NOX?

4 MR. RUBENSTEIN: I think what you're
5 thinking of is we added some toxics monitoring
6 capability to the district's Pittsburgh station.

7 MS. LAGANA: Right.

8 MR. RUBENSTEIN: But, I mean everybody
9 here from Calpine is shaking their head and has
10 the same recollection as I do, that I don't think
11 we added any NO2 to that station. I don't think
12 we proposed to do that and I don't think we
13 discussed it. We can continue this discussion
14 later and I can check when I get back to my
15 office.

16 MS. LAGANA: Okay. I'll take it off
17 line.

18 MR. FRANCO: But the information -- the
19 data that we get from the applicant is only what
20 we requested, it's PM10 and PM2.5. There is not
21 NO2 data --

22 MS. LAGANA: So the only NO2 data is
23 coming from Bethel Island?

24 MR. FRANCO: Bethel Island and
25 Pittsburgh.

1 MS. LAGANA: And Pittsburgh.

2 MR. FRANCO: Yes.

3 MS. LAGANA: Which is not the norm?

4 MR. FRANCO: That's a new one --
5 that's --

6 MS. LAGANA: On page 13 on the graph
7 that you have regarding PM10 --

8 MR. FRANCO: Now with respect to PM10
9 the analysis -- again, this is the worst case
10 analysis -- indicates that the PM10 incremental
11 impacts will be about five micrograms per cubic
12 meter. However, the actual impacts have to be
13 much lower than five micrograms per cubic meter.
14 And this is because, again, of the conservative
15 assumptions made in the monitoring exercise and
16 also because, in this case, most of the PM10
17 impacts are estimated to be due to the cooling
18 towers.

19 Now we know that the droplets from the
20 cooling towers are much larger than PM10. PM10 is
21 particles less than 10 microns. The droplets from
22 the cooling towers are in the 100 to 200
23 micrometers -- microns. So, what we did when we
24 monitored the cooling tower was assume that all
25 the solids, the solids in the droplets immediately

1 are released as very small particles. In practice
2 we know that that's not the case and that most of
3 the droplets fall into the ground very close to
4 the stack, long before they actually become PM10.

5 So this five micrograms per cubic
6 meters, we're using analysis, the worst case,
7 however the actual impact levels are going to be
8 much lower than that.

9 MR. TATAMER: What are the environmental
10 impacts of this stuff that's falling within this
11 radius?

12 MR. FRANCO: For the larger particles --
13 I mean for the droplets from the cooling tower,
14 that's what you're asking for? Because they are
15 so large, they are not -- besides they will be --
16 when we did the analysis the impact will be more
17 or less 30 meters northeast of the cooling towers.
18 And as far as I know that is an industrial area,
19 there is no residential.

20 MR. TATAMER: My question was, very
21 clearly and I'll repeat it, what is the
22 environmental impact and what is the short and the
23 long-term environmental impact of NO2 or PM10 on
24 the human respiratory system?

25 MR. FRANCO: For the droplets it's

1 insignificant, there's no impacts.

2 MR. TATAMER: NO2?

3 MR. FRANCO: For NO2 the ambient
4 standards are designed to protect the most
5 sensitive member of the population. For that
6 reason and because the total impacts are going to
7 be lower than the ambient air quality standard,
8 there shouldn't be any significant impact.

9 MR. TATAMER: Well, again, I appreciate
10 your comments. I'm asking a scientific question
11 and you're really coming off like a salesman. You
12 know, I even object -- you know, I mean this is an
13 outrage here where you're saying air quality
14 impact. Let's call it what it is, it's an air
15 quality statistic. You know, what is the impact,
16 what is the human impact, short or long term?

17 You know, I think this again echoes --
18 and I'm going to profess to be tired, as I'm sure
19 everyone is here, you know, this subject has been
20 a very emotional subject and I know that everyone
21 can appreciate that. You know, this has divided
22 established friendships, tested them and in
23 certain cases probably made them better. You
24 know, it doesn't kill us, it makes us stronger.

25 But, you know, I want to make sure that

1 this plant doesn't kill us. And, you know, I
2 appreciate your research, I appreciate what you've
3 done, I know that you're doing, as a research
4 analyst, I know you're doing the best job you can.
5 You know, as a city official, I think in order to
6 attack or to really understand any sort of
7 situation, you've got to put yourself in the other
8 shoes.

9 I understand significant economic
10 benefit to Pittsburgh. I mean, you know, without
11 mixing bones, this is a low income area and I'm,
12 unfortunately, upset that we kind of take this low
13 income mentality as well. And, you know, I'll
14 make my point, I wish we'd talk about the human
15 impact, rather than statistics and call it what it
16 is.

17 MR. FRANCO: Well, I try to do that, sir
18 and unfortunately I wasn't able to explain it to
19 you. But our job is to protect the public health
20 and that's what we do.

21 However in the final analysis I will try
22 to answer your questions as best as I can. I mean
23 that's the only thing I can promise.

24 COMPLIANCE PROJECT MANAGER SCOTT: I
25 think Gary wanted to make a comment or address his

1 comments.

2 MR. RUBENSTEIN: Yeah, I can
3 specifically answer your question. I'll do my
4 best, given the lateness of the hour. Nitrogen
5 dioxide is a pollutant that affects, I think,
6 principally the cardiac system through the blood
7 and the respiratory system. It has the effect of
8 aggravating certain types of diseases that people
9 already have. So that is the scientific answer of
10 what does nitrogen dioxide do.

11 In terms of the impacts of this project,
12 this project will not cause any violations of
13 either the state or federal air quality standards
14 for nitrogen dioxide. What does that mean? Those
15 standards are designed to make sure that, in case
16 of the state standard, if you breathe a level of
17 nitrogen dioxide that's at the state standard for
18 one hour that you will not suffer any ill effects
19 at all with the safety margin and taking into
20 account the special needs of children and the
21 elderly, in terms of their special sensitivities.

22 And so this project will not reach that
23 level. In point of fact that level has not been
24 exceeded in California anywhere for over 15 years.

25 In terms of the federal air quality

1 standard, that is an annual average standard.
2 That looks at, if you were to breathe a lower
3 level of nitrogen dioxide over the course of an
4 entire year, it would make sure that if you're at
5 that level or less, you will not suffer any health
6 effect, adverse health effects at all.

7 That standard has not been exceeded
8 anywhere in California for about seven years and
9 prior to that it was exceeded only in one
10 community in the South Coast Air Basin in Southern
11 California and before that it had not been
12 exceeded anywhere for at least another ten to
13 fifteen years.

14 Does that answer your question?

15 MR. TATAMER: Well, yes, given the fact
16 you're on that side of the desk and, again, we
17 have to draw a line and say I appreciate your
18 comments.

19 MR. RUBENSTEIN: Okay.

20 MR. TATAMER: I wish we could verify
21 those statistics, but I appreciate them.

22 MR. RUBENSTEIN: Okay.

23 MR. MacDONALD: Those statistics and
24 those levels are based on healthy males, they're
25 not --

1 COMPLIANCE PROJECT MANAGER SCOTT:

2 That's not true, Jim --

3 MR. MacDONALD: -- they're not based on
4 children. You know that that is currently going
5 on and those levels are currently being discussed
6 and hopefully soon will be coming out. And
7 secondly, the other medical evidence which has
8 only been out within the last year and a half
9 suggests that the impact on children is much
10 greater than ever suspected.

11 But, my question to you, though, is that
12 in the air quality studies that were done for the
13 initial, it was pointed out that some of it -- the
14 most significant concentrations could actually be
15 in the wintertime with conversion and that the
16 direction of the winds are practically none, zero
17 -- I live in the area so I know, at that time they
18 will be drifting directly from these powerplants
19 into the homes.

20 Now you're saying that you only tested
21 for the northeast, whereas the possibilities for
22 actual -- and saying that's industrial and you
23 don't care, there's no effect, where the air
24 studies are actually showing that the possible
25 worst case scenarios from the stats, where it's

1 coming up and going straight back down will be in
2 the wintertime, will be when the air directions
3 are towards the Central Addition, towards the
4 downtown. And so why aren't we giving us that
5 information since we're the ones that your own air
6 studies show that we're going to be the most
7 adversely affected in the wintertime and that the
8 concentrations are mostly likely to be the
9 greatest?

10 MR. FRANCO: When I said that the
11 maximum impacts occur 30 meters northeast of the
12 powerplant, I was referring to the impacts from
13 the cooling towers. For NO2 the impacts occur
14 somewhere else.

15 For the modeling exercise, we modeled
16 the entire region, so the numbers that I'm giving
17 you are the worst case numbers anywhere in the
18 modeled region.

19 And another comment with respect to NO2
20 is that the, and will show in my final analysis,
21 is that the NO2 ambient concentrations in this
22 region and in the entire California are going
23 down. So it's information that I think you need
24 to have.

25 I think my assumption, I think it was

1 wrong, was to assume that, because that
2 information was part of the original analysis for
3 the original application, that I didn't need to
4 revise and present that information again, but I
5 will do it in my final analysis.

6 So, just to finalize this, I will just
7 end up with my preliminary conclusions, my
8 recommendations, and the preliminary conclusions
9 are the following.

10 First, the permit conditions, if
11 granted, will not result in unmitigated
12 significant air quality impacts. The amendments
13 comply with all applicable air quality laws,
14 regulations or standards and our preliminary
15 recommendation will be to approve the proposed
16 changes in permit conditions.

17 Thank you very much.

18 MS. HUGMAN: I'm stuck on the cumulative
19 effect of pollution and have been since I started
20 becoming involved a couple of years ago. So it's
21 with the EPA here sounding like they're saying
22 there's no real impact to the addition that
23 they're talking about. And, in fact, 11
24 powerplants in a community that has a lot of
25 traffic sitting on the roads and everything too,

1 is really significantly below any danger levels,
2 then that would say to me that every community in
3 California can have 11 powerplants and would still
4 be just peachy, and that doesn't make any sense to
5 me.

6 Could you address that, please?

7 MR. FRANCO: The meteorological
8 conditions, and I don't want to sound like I'm
9 trying to -- I mean I will try to explain the best
10 I can.

11 The air concentrations in the ambient
12 air depends on two factors. The first factor has
13 to do with the emission levels, how much
14 emission --

15 MS. HUGMAN: With emission what?

16 MR. FRANCO: Emission levels, how much
17 pollutants goes to the air. And the second factor
18 has to do with the meteorology conditions, how
19 fast the wind blows, directions, if we have hills
20 around, the stability of the atmosphere. If you
21 have a very stable atmosphere, the pollution
22 doesn't disperse very well.

23 So these two factors are the factors
24 that are going to determine the ambient air
25 quality conditions in an area. So you may have a

1 situation where you have an area with half of the
2 emissions levels that you have in this area, but
3 with the worst ambient quality conditions, because
4 the meteorology is not good enough to disperse the
5 pollutants to produce lower concentrations.

6 That's why we cannot rely only on
7 emissions, we have to rely on measurements of
8 actual ambient air quality conditions and we have
9 to rely on air dispersion models, to take into
10 account both, emissions and dispersion and the
11 existing conditions to find out what would be the
12 actual impact in a given area.

13 So 11 powerplants in a different area
14 may not -- may result in a significant impact.
15 And if that's the case, those powerplants will not
16 be sited.

17 Our regulations require for every
18 application to do a cumulative impact analysis, to
19 take into account not only the proposed project,
20 but also the other projects that are coming on
21 line and also to take into account the existing
22 ambient air quality conditions. That was done for
23 this powerplant, the analysis included that. The
24 same analysis being done for the new powerplant,
25 they will consider this powerplant and the new

1 powerplant.

2 If the emissions from this powerplant
3 pass the 15 -- the air quality standards, those
4 powerplants will not be able to be built. They
5 will not receive permits to construct or
6 conditions of certification from the Commission.

7 MR. RUBENSTEIN: Let me, if I can, also
8 try to put that in perspective. Since pollution
9 controls were first retrofitted to powerplants in
10 California in the late 1960s and early 1970s and
11 then since all the powerplant operators were
12 forced to switch from oil burning to gas in the
13 late 1970s and early eighties, once that was done
14 it is absolutely true that you could build 11
15 powerplants in many parts of California, not all,
16 but in many parts of California and not create any
17 air quality problems.

18 One of the real ironies, especially with
19 the new powerplants in terms of how clean they
20 are, the stamps analysis, and I think it was table
21 16 -- page 16, was it, that had the air quality
22 impacts, showed for this project a number of 235
23 micrograms per cubic meter of nitrogen dioxide
24 coming from this plant and the air quality
25 standard is 470.

1 Over 90 percent of that 235 comes from
2 the diesel fire pump. That little diesel fire
3 pump that operates an hour a week or an hour a
4 month, generates 90 percent of that number. The
5 560 -- I don't want to get into that. The larger
6 number for the gas fired powerplant is ten percent
7 of that total. And that's just an indication of
8 how clean the new plants are and why you could,
9 not that anybody wants to, but why you could
10 safely, in terms of air quality, have that many
11 plants in one place.

12 MR. FRANCO: We usually have problems
13 when we model the small equipment, because, first
14 of all, they are already close to the -- the
15 emissions are very close to the ground. And
16 secondly, the emissions are relatively high, so
17 like Gary said usually most of the emissions comes
18 from these small units and they don't come from
19 the larger powerplants. That's very common.

20 But, if the powerplant, with this small
21 emergency generator or diesel pump, together, even
22 if the impact is only due to that small unit, if
23 the impact is higher than the ambient air quality
24 standard, that powerplant will not be able to be
25 built. That's because the ambient air quality is

1 considered as an absolute, that nobody can produce
2 a violation of the ambient air quality standards.

3 MS. LAGANA: And thank you for that
4 clarification, but it brings a question to mind,
5 in that this diesel run fire pump can run an hour
6 a week for testing up to a hundred hours a year,
7 yet no offset credits are demanded for this, nor
8 for the backup generator.

9 MR. FRANCO: The total emissions in tons
10 per year is less than one ton per year. I mean
11 it's extremely, extremely small.

12 MS. LAGANA: But it's accounting, like
13 you said, for a large portion of that NOX figure.

14 MR. RUBENSTEIN: Right, but as Guido
15 said, there are two parts of that. One is the
16 emission rate and the second is the dispersion.

17 MS. LAGANA: Okay.

18 MR. RUBENSTEIN: And so when you talk
19 about emission reduction credits you're talking
20 about the emissions and the problem with those
21 small pieces of equipment is really the dispersion
22 and not the tons of pollution that you're getting
23 from them.

24 MS. LAGANA: On page 11 when you talk
25 about the offset requirements for the

1 calculations, it was my understanding in general
2 that when you have a NOX emission that your offset
3 is a NOX offset.

4 MR. FRANCO: That's what was going to
5 happen in this case --

6 MS. LAGANA: Right.

7 MR. FRANCO: -- because they have enough
8 NOX offsets, yes.

9 MS. LAGANA: But in the case of PM10 in
10 your document it states, "Calpine will use 32.2
11 tons of SOs, sulphur oxide, to offset the 8.05 ton
12 increase in PM10 emissions." And you call it an
13 inter-pollutant ratio of four to one. So, I'm not
14 a scientist, so how can you have sulphur --

15 MR. FRANCO: Yeah, SOX is a gaseous
16 pollutant that rapidly is oxidized and produces
17 particulate matter.

18 MS. LAGANA: It does?

19 MR. FRANCO: It does. The four to one
20 ratio is a very very conservative ratio. It's
21 assuming that only four pounds of SOX uses one
22 pound of particulate matter. In practice, the
23 actual ratio is around one to one. But, again,
24 this is just the nature of our analysis and the
25 district's requirements to use the most

1 conservative assumptions.

2 MS. LAGANA: So what kind of particulate
3 matter does it produce, PM10, Pm2.5?

4 MR. FRANCO: It produces PM10.

5 MS. LAGANA: It does?

6 MR. FRANCO: Yes. And actually even --
7 I mean very very small particles, even smaller
8 than ten microns.

9 MS. LAGANA: It's interesting because
10 you're offsetting a PM10 with something that
11 eventually becomes PM10. I mean it sounds odd.

12 MR. FRANCO: That's the reason we allow
13 the inter-pollutant -- I mean the offsetting of
14 SOX for PM10, because SOX eventually becomes
15 particulate matter.

16 MR. RUBENSTEIN: Over half of the PM10
17 that we breathe starts off as a gas. Less than
18 half of the PM10 that we breathe in the air is
19 actually emitted from some source as PM10. And
20 that's why the idea of doing inter-pollutant
21 offsets and inter-pollutant controls for PM10 is
22 very common, because so much of what we breathe,
23 in terms of PM10 is made up from basically
24 aerosols that are formed and chemical reactions
25 that go on in the air all the time.

1 MS. LAGANA: So by the time it gets to
2 an air monitoring station, does it come across as
3 PM10?

4 MR. RUBENSTEIN: The sulphur dioxide
5 from a source here probably will not fully form
6 PM10 for many hours and so it would be many miles
7 down wind. That's one of the reasons why the
8 ratio is set so high.

9 MS. LAGANA: So is that really captured
10 by -- that's our gift to Oakley?

11 (Laughter.)

12 MS. LAGANA: It's not really captured by
13 our monitoring station, right?

14 MR. RUBENSTEIN: Well, you get plenty of
15 gifts from Oakland here.

16 MS. LAGANA: Oakley, I was saying.

17 MR. RUBENSTEIN: I know, but coming the
18 other way.

19 MS. LAGANA: In Oakland, yeah.

20 MR. FRANCO: But also, I mean when you
21 have the worst PM10 conditions in this area, the
22 air is just stagnant, so all that SOX will also
23 impact this area. Also during the summertime the
24 conversion of SOX to particles is very fast. So,
25 again, you may have 50 percent conversion in one

1 hour during the summertime.

2 One thing that I want to say about
3 offsets is that you have to see offsets as a
4 solution to an original problem. For example, the
5 offsets that were generated for Crockett were
6 generated in the upwing of Crockett. So they will
7 benefit Crockett. They will benefit Martinez.
8 They will benefit Pittsburg, Antioch.

9 So the net effect is going to be that
10 with the implementation of the quality management
11 plans that the ambient air quality conditions
12 should improve.

13 MS. LAGANA: And on page 13 there's a
14 point of clarification. "An investigation into
15 the cause of the high PM10 concentration on
16 October 15th, 2000," shouldn't that be 1999?

17 MR. FRANCO: 1999, thank you.

18 MS. LAGANA: Okay.

19 But on that chart because the location
20 of the new air monitoring station called Calpine
21 Pittsburg, I guess, wasn't really up and running
22 until March 24th, all of the stats before that you
23 have in here that you include, before March, let's
24 say 17th, for argument's sake, really is
25 inaccurate --

1 MR. FRANCO: Yes.

2 MS. LAGANA: -- in terms of the --

3 MR. FRANCO: Remember that -- I mean we
4 don't want to hide anything.

5 MS. LAGANA: No, no, I know what you're
6 saying.

7 MR. FRANCO: And that's why we present
8 everything. If this was just a strict engineering
9 or scientific analysis I would not be allowed to
10 present it at or before March 24, because --

11 MS. LAGANA: I'm just curious, since the
12 document and the analysis didn't come out through,
13 let's say November, why weren't the statistics for
14 June and July and August, which were available I
15 would assume, included?

16 MR. FRANCO: The district, when they
17 collect air quality data, the data has to go to a
18 quality assurance, quality control process. And
19 that takes a long time.

20 MS. LAGANA: I figured it took about
21 three months. Chuck, is that about right?

22 MR. FRANCO: So what I could do, in the
23 final --

24 MS. LAGANA: I'm sorry I'm making you an
25 expert, you're not, okay.

1 (Laughter.)

2 MS. LAGANA: Forgive me. I think better
3 of you than you do.

4 MR. FRANCO: So what I could do is take
5 the final analysis to try to update this graph.

6 MS. LAGANA: Can we have later stats
7 than this because I think we would have more
8 information in a longer period?

9 MR. FRANCO: Yes, I will contact the
10 district to see if they have additional data.

11 MS. LAGANA: For those three, for the
12 three.

13 MR. FRANCO: Yes.

14 MS. LAGANA: That would be great.

15 MR. RUBENSTEIN: Well, I think actually
16 you have more recent data for the Calpine
17 Pittsburg station, don't you? It's the two Bay
18 Area district stations that lag behind.

19 MS. LAGANA: But even Calpine Pittsburg
20 will give us a better picture than this is and I
21 would appreciate it if you could let me know when
22 that would be available. If it's not going to be
23 available for this document, when it would be
24 available, because we have another powerplant
25 we're looking at on Monday.

1 They are also using these stats and
2 they're saying they can't get this information
3 either and I'd like to give them some information.
4 Okay, thanks.

5 MR. FRANCO: You're welcome.

6 MR. MacDONALD: One quick question.

7 COMPLIANCE PROJECT MANAGER SCOTT: Okay.

8 MR. MacDONALD: Those diesels that are
9 being used for the fire pumps, are those going to
10 be equipped with catalytic converters?

11 MR. RUBENSTEIN: No.

12 MR. MacDONALD: Okay. Because there is
13 technology now available for diesel catalytic
14 converters.

15 MR. RUBENSTEIN: That technology that is
16 required is a health risk assessment showing that
17 the diesel engine will exceed the acceptable risk
18 levels and these diesel engines do not, but that
19 was evaluated.

20 MR. GLENN: My name is Bill Glenn and
21 I'm a member of the Pittsburgh Planning Commission.
22 I've also been on the Enron Powerplant Advisory
23 Commission since day one and currently serve on
24 the Calpine one.

25 I want to point out that issue of

1 cumulative is not new to this process. It's been
2 in effect since the first that I joined the
3 Powerplant Advisory Commission that was formed by
4 Enron.

5 One of the things that we did in
6 conjunction with Paulette and a whole bunch of
7 other people was to ensure that we didn't get into
8 the trap which I find ourselves in right now of
9 trying to tag powerplants that have not come on
10 line yet with pollution that they haven't created
11 yet. That was the whole purpose of bringing about
12 the additional monitoring station in order to come
13 up with a baseline study that determined what are
14 we living with now to answer Mr. MacDonald's
15 question and this lady's question over here.

16 The purpose of that was to try and
17 determine exactly where are we in terms of what
18 are we breathing and what is the industry that
19 surrounds in the general Bay Area creating. It
20 took about a year to get BAAQMD to agree to put in
21 that monitoring station and the we went through
22 the flooding issue. We went through what are we
23 monitoring and how should it be equipped and we
24 don't have people to monitor it.

25 And finally Calpine, in frustration,

1 after they had bought the Enron plant said, you
2 know what, it's in our best interests to establish
3 this monitoring station because that way it's
4 going to work for us because we will be able to
5 determine additional data that is not ours, it
6 belongs to somebody else. And it appears to be
7 working.

8 Now, reason prevails, and a lot of
9 people have mentioned it tonight, so what are we
10 breathing? Where is it coming from? What's the
11 source? How high is the stack? How should it be
12 visible to the skyline? Do we want to make it
13 400-foot tall? Do we reverse the plant like we
14 did in LMEC and put the stacks further to the
15 east, which created a little bit of a furor in
16 Antioch and so on.

17 The point being is, one of the other
18 issues that I think is important is that when you
19 buy a plant that is at a fire sale, as Calpine
20 did, and then attempt to reconfigure it to match
21 what is considered to be a proven model that's
22 located in Texas, that doesn't exactly match the
23 micro climate that exists in the Pittsburg basin,
24 not now, not tomorrow and not ever.

25 What it does is it gives you a good

1 handle on the technology of the powerplant in
2 particular that you're attempting to modify from
3 the one that exists.

4 I think the other point that was very
5 important and was made tonight is this. Let's say
6 for the sake of argument, you produce an F-4
7 aircraft and it's entitled Model A. It is the
8 same airplane when it gets to Model G. It just
9 happens to be more powerful, better equipped and
10 can do different things in better ways.

11 All I'm saying is they're trying to
12 improve the powerplant and work on the thing and
13 try to get it to be optimized as much as possible.
14 My assumption is, having sat through many
15 meetings, that the technology that is being
16 utilized and delivered and installed in the deck
17 plant closely resembles either the Texas plant or
18 the modified and proposed plant that is being
19 built at LMEC, because obviously that's the best
20 technology available and it's in their best
21 interests to do so.

22 Another variable that I haven't heard
23 mentioned here tonight at all in terms of the
24 cumulative effect is, what is the designation
25 associated with a given plant? Is it a 247 plant

1 or is it restricted to run less than 247?

2 Well, as a matter of fact, since we're
3 about six megawatts short of demand in this
4 particular area, based on figures I've heard, it's
5 in somebody's best interests to run 247 because
6 that's where you provide the power and don't have
7 rolling brownouts, etc.

8 Questions have been asked, is the new
9 deck plant going to be 247? It hasn't been
10 determined yet. What's happening with the Antioch
11 plant as far as its pollution? It doesn't have
12 any because it's dead. So that's why we're
13 talking about repair by replacement with the new
14 plant that's coming on line. Depending on whose
15 figures you want to talk about, it's around 560
16 megawatts, but we won't get into that.

17 The bottom line question that still
18 remains is under certain conditions of meteorology
19 and certain conditions of product, based on
20 demand, what is the cumulative effect on the
21 population in closest proximity to these sources,
22 and that hasn't been answered yet.

23 So if need be, we need to push for more
24 monitoring stations that will encompass a
25 monitoring program for all types of emissions

1 before these new powerplants come on line. And
2 we're not there yet, because I heard some
3 emissions tonight that are not being monitored and
4 may be incapable of being monitored effectively.

5 And Mr. MacDonald is correct, depending
6 on the time of the year, I have a 30-foot flagpole
7 in my backyard, I live right on the water, on the
8 river and that flag can blow 360 degrees in ten
9 minutes time and only a difference in 30-foot
10 elevation. I have a windmill sitting down below
11 that, it doesn't move at all.

12 So with 150 or 400-foot stack I would
13 imagine you could go out there and look at the
14 flume and it rises straight in the air on some
15 days, but the wind's blowing in your face on the
16 ground.

17 So where is it coming from, what is the
18 cumulative effect and how is it deposited and
19 those stats are absolutely imperative. And to
20 permit a lag time for some agency that's quality
21 control of 90 days when you're trying to produce a
22 document for certification or licensing problems
23 is ridiculous, I'm sorry.

24 They need to get off the dime and get
25 with the program. Thank you.

1 COMPLIANCE PROJECT MANAGER SCOTT: Thank
2 you.

3 Okay. If there aren't any more
4 questions, let's move on to public health, which
5 is the last one. And we changed the agenda,
6 because we felt that going with air quality first
7 would provide more of a background for Mike to
8 present his analysis. And we are way over, so
9 we'll make this pretty quick. Okay? Thank you.

10 ENVIRONMENTAL PROTECTION OFFICER RINGER:
11 In general public health tries to deal with all of
12 the other toxic pollutants that are not accounted
13 for in the air quality analysis, that being
14 noncriteria pollutants or those which do not have
15 ambient air quality standards established.

16 That having been said, I'm going to go
17 back to air quality just for a second and clarify
18 a couple of things. One is on the table six on
19 page 16, where it talks about the impacts and the
20 total impacts and the most stringent standard.
21 Contrary to anything that's been said here
22 tonight, state air quality standards by law must
23 be based on trying to protect the most sensitive
24 members of the population with an additional
25 margin of safety. These are not always white

1 males, sometimes they're healthy people and
2 sometimes they're not.

3 In the case of ozone it turns out that
4 healthy people are more susceptible to the effects
5 of ozone when they exercise because they do
6 exercise and they breathe more deeply. So the
7 ozone actually affects healthy people more than it
8 does say asthmatics, who don't breathe as deeply.

9 In other cases, people such as infants,
10 the elderly and people with existing illnesses
11 are, indeed, more susceptible to pollution and
12 that's taken into account in these standards, and
13 it's taken into account as a matter of law.

14 The standards are examined and they're
15 reexamined and I believe it's on a five-year
16 basis. It's true that Senate Bill 25, which was
17 passed, requires the Air Resources Board and the
18 Office of Environmental Health Hazard Assessment
19 to reassess the adequacy of some of these
20 standards and that's in process now.

21 So, referring to this table, when we
22 have a total impact in NO2, for example, of 399
23 micrograms, compared to the standard of 470, by
24 definition, as it sits today, anything that's less
25 than the standard does not cause and is not

1 expected to cause any health impacts to anybody,
2 including sensitive members of the population.

3 So in answer to the health based
4 question that arises from this table, that is we
5 wouldn't expect any health impacts at these
6 levels.

7 In the case of PM10, you're already over
8 the standard. When this plant adds additional
9 PM10, then that's why we have offsets to take that
10 into consideration.

11 In the public health analysis, yes, this
12 is abbreviated quite a bit from the original
13 public health analysis that was done for the
14 original application. This only deals with
15 changes brought about by the amendments and it
16 doesn't go into as much detail for that reason.

17 A very quick summary of public health is
18 that we use risk assessment and health risk
19 assessment modeling to try to estimate what the
20 impacts are. Since there are no ambient air
21 quality standards, we can't say that the air that
22 you breathe is below a certain level, for
23 instance, like with NO2 and therefore it's safe,
24 there are no standards at all.

25 So what we have to do instead is try

1 to -- when I say estimate, these are all worst
2 case estimates. We don't actually believe that
3 anything like this will happen because it is
4 theoretical worst case and when we continue to
5 talk about theoretical worst case sometimes we
6 fall into the trap of thinking that these are
7 actual estimates of what we will actually be
8 breathing, and that's not the case.

9 So that having been said, we try to
10 figure out what you could possibly be exposed to
11 once it comes out of the stack, and somebody --
12 actually is done for an area surrounding the
13 entire facility for every hour of the year. So if
14 something comes out of the stack, for every hour
15 of the year, depending on the worst case
16 meteorological conditions, where does that end up?
17 If it ends up two miles over here and somebody is
18 exposed to it, you know, what effect does that
19 have on them.

20 We do that for an hour, one hour basis,
21 and for -- the acute and for chronic basis, for
22 both noncancer and cancer. The acute is only for
23 noncancer.

24 So, if you take a look at those three
25 different types of calculations, and this is on

1 page 20 of the document, where you have public
2 health table one and public health table two.
3 These analyses were done both for the facility
4 itself and for the diesel fire pump engine and it
5 was done for the entire facility. In other words,
6 if the incremental changes to this facility were
7 on the order of what was discussed earlier, 17 to
8 29 megawatts, or whatever it was, we don't just
9 look at that increment, we look at the entire
10 facility output.

11 And we did that originally for the
12 facility that was described there and we're doing
13 this over again for the newly described facility.
14 And I'd like to just interject also that at no
15 time did I ever take into account how many
16 megawatts this plant was designed to produce.
17 That's not a part of any of the calculations that
18 I do or anything that's involved with public
19 health.

20 We strictly deal with the amount of
21 emissions that come out of the stack and the
22 amount of fuel that's burned and meteorological
23 conditions, things like that.

24 There was some recalculations that were
25 done because of the conservative nature of health

1 risk assessments and it turned out that, although
2 it's always conservative, it was especially over
3 conservative in a certain area where they assumed
4 that a certain toxic substance, that being
5 hexavalent chromium, would be emitted from this
6 plant when, in fact, it would not be. And that
7 had a fairly large impact in the changes.

8 So in this table we have the current and
9 proposed, acute noncancer hazard. The current --
10 the new calculations were .04. The old
11 calculations were .08. The number that we look at
12 to determine the health risk is 1.0.

13 And a simple way to describe this would
14 be at the level of 1.0 it still wouldn't affect --
15 we wouldn't expect anybody to be adversely
16 affected by this plant. We wouldn't expect
17 anybody's health to be adversely affected.

18 So the current level is 1/25 of the
19 level of significance. So that means it's far
20 below that. And, again, this is the worst case,
21 using a number of worst case assumptions and we
22 don't even expect .04 to be reached.

23 Going down one line, on the chronic, we
24 have .018, which is a little bit higher than what
25 it used to be. It was .010. But, again, that's

1 far, far below the significance level of 1.0.

2 Then to go down to cancer, the cancer
3 risk -- I had that backwards. The proposed is the
4 new calculations and the current is the old
5 calculations. So the acute went up by .04 to .08.
6 The chronic decreased from .018 to .010. And
7 similarly the cancer risk decreased from .5 to
8 .13.

9 The cancer risk is slightly different.
10 That's the chances in a million, so over a
11 person's lifetime if they were constantly exposed
12 at the particular geographic location of the
13 maximum impact from this facility, if they were to
14 stand there for 70 years and be exposed to these
15 toxic substances, there's only .13 chance in a
16 million extra than contracting cancer over their
17 lifetime. And that means that their normal chance
18 of contracting cancer is anywhere from 250,000 to
19 300,000 in a million and this would only add. 13
20 to that, under worst cases.

21 A normal case would be far lower because
22 of the way that the calculations are done and the
23 conservatism that's built in.

24 Turning to the diesel fire pump engine,
25 we have similar results. The diesel fire pump for

1 all three types of health risks that we look at
2 are far, far below any levels of significance.
3 And that's pretty much the way it was -- that's
4 what we've seen in other projects as well.

5 So we've concluded that the changes in
6 this project don't have any significant impacts on
7 public health and they don't have any changes in
8 impacts to public health. We didn't expect any
9 significant impacts from the project the way it
10 was configured in the past and we don't expect any
11 significant impacts from the new configuration.

12 A little bit of perspective on
13 cumulative impacts. In air quality you can do a
14 cumulative impact modeling by taking into account
15 background calculations and seeing what this would
16 add to that. You can't do exactly the same thing
17 with toxics because there's no real ambient
18 standards to look at.

19 What I have done is I've looked at the
20 Bay Area Air Quality Management District's
21 calculations of average risk of breathing air,
22 just over the entire Bay Area and that's decreased
23 in the past several years, due mostly to
24 reformulated gasoline and advances in auto
25 technology and the diesel fuel program that they

1 have.

2 That used to be around 500 in a million
3 excess chances of cancer. So that means that the
4 average person in the Bay Area, their chances of
5 getting cancer over their lifetime would be
6 increased by 500 in one million. So if it were
7 250,000 in a million before, now it would be
8 250,500 in a million.

9 With the reformulated gasoline, that's
10 gone down to about 199 in a million or something
11 like that. So it's gone down by more than half.
12 So this plant then would add less than one to that
13 number. It would add less than actually .13

14 And again that .13 is calculated at the
15 single point of maximum impact and at all other
16 points it would be far less than that. So you
17 can't really add the .13 to the larger number,
18 because the .13 is only in one specific location.
19 It's lower everywhere else. And that's the same
20 with the acute and the chronic noncancer impacts.

21 Those numbers are only valid for one
22 particular location. It's lower everywhere else
23 and I think I might have put in here where those
24 locations were. I guess it's not in here. I
25 could put that in.

1 The original analysis had the location
2 of all these maximum impacts and they tend to be
3 different locations. It's not necessarily true
4 that the closer you are to the plant the worse the
5 impact because of dispersion or whatnot.
6 Sometimes the worst impacts are four or five miles
7 away.

8 But we assume that there is a person
9 standing at each location of maximum impact
10 breathing that air and we assume doing those
11 calculations that even that person is not -- their
12 health would not be compromised.

13 That concludes my presentation. I'd be
14 glad to answer questions.

15 MS. BLACKWOOD: Well, actually my
16 question was where was that place you were talking
17 about?

18 Actually I just had something that I
19 wanted to say before we were done tonight and it's
20 something that I'd really like to have this panel
21 take back to the California Energy Commission.

22 I think it really needs to be an
23 understood thing by the California Energy
24 Commission that you people, as a whole
25 organization, have more responsibility to the

1 citizens of the Pittsburg Antioch area to not
2 allow one community to shoulder a major portion of
3 the California energy crisis.

4 In the future, myself and many other
5 people that I know that live here would like you
6 to make, not just the City of San Jose, but other
7 places who have applied for permits -- for people
8 who have applied for permits to build powerplants,
9 shoulder their portion of this responsibility for
10 this crisis that we have.

11 I'm sure that you guys have heard up in
12 Sacramento we've already paid for San Francisco's
13 BART, so we have no wish to house their powerplant
14 or to have any more powerplants built here.

15 So we'd be most appreciative if, in the
16 future, you would kindly be morally responsible
17 about making those decisions. Thank you.

18 COMPLIANCE PROJECT MANAGER SCOTT: We
19 will pass that on.

20 MS. LAGANA: Thanks for the report.

21 What is the dispersion area, you know,
22 when you talk about this one place. Are you
23 talking about the immediate site, is that what you
24 mean when you say this one location?

25 ENVIRONMENTAL PROTECTION OFFICER RINGER:

1 No, when they do the modeling they set up a grid
2 system and the space between the grids varies with
3 the distance from the plant, and Gary can probably
4 tell me exactly how far out that went with this.

5 I know that the maximum impact location
6 of the original modeling was several miles from
7 the plant.

8 MS. LAGANA: It's usually five, I think.

9 MR. RUBENSTEIN: Yeah, in the
10 application that we sent into the Commission, we
11 had a picture showing what the sampling grid is
12 and how big it is. I know you can't see it back
13 there. Each one of the dots on this chart is a
14 receptor that we looked at and so we laid it out,
15 really, over the entire area.

16 The grid size looks to me like it was 30
17 kilometers -- 20 kilometers by 30 kilometers. So,
18 it's getting too late for me to do the math -- 12
19 by 18 miles around the area.

20 MS. LAGANA: So 12 to 18 miles?

21 MR. RUBENSTEIN: And that's how far out
22 it was spread.

23 MS. LAGANA: In a radius?

24 MR. RUBENSTEIN: No, in kind of a
25 square.

1 MS. LAGANA: In a square?

2 MR. RUBENSTEIN: Yeah, rectangle. And
3 close in to the plant the grid spacing would have
4 been about 30 meters, about 90 feet apart, 100
5 feet apart. And then also any place where, during
6 our screening analysis, we saw concentration that
7 was relatively high we would also put a grid of 30
8 meter spacing in that area as well. So it pretty
9 densely covers the area to make sure that we find
10 where that worst location is.

11 MS. LAGANA: And you're saying at that
12 worst location these are your stats?

13 MR. RUBENSTEIN: Right.

14 MS. LAGANA: Okay. So for the record,
15 and I think you've heard this from me before,
16 Mike, and maybe Jeri hasn't, but for the record,
17 County Health, Contra Costa County Health, has
18 come out with a video document or a video report
19 regarding chronic illness and chronic disease in
20 Contra Costa County.

21 It names five cities, two of them are
22 Pittsburg and Antioch. The others are all in the
23 west county. I don't know how that figures into
24 your calculation, but I would request that the
25 California Energy Commission realize that this is

1 county health telling us that in Pittsburg and
2 Antioch our susceptibility to chronic disease is
3 higher than in most of the cities in Contra Costa
4 County, except for three over in Richmond, El
5 Cerrito and, I forget, Pinole, I think.

6 So, you know, with that kind of information
7 coming from County Health, you can see why we have
8 concerns regarding the impact of this many plants
9 and industrial, you know, facilities, but
10 certainly in the plants coming into our area and
11 giving us, you know, the emissions that we're
12 going to be experiencing, you know, by living
13 here.

14 MR. RUBENSTEIN: We're in the process of
15 obtaining the background information that was used
16 for that video.

17 MS. LAGANA: Great, good. Have you
18 spoken to Gena?

19 MR. RUBENSTEIN: I think somebody
20 else --

21 MS. LAGANA: Gena File. Okay, thank
22 you.

23 MR. LENGYEL: Mike Lengyel, just to
24 follow up on what Paulette Lagana said.

25 You're talking about statistics and

1 models and regulations and ambient air standards,
2 but we're talking people, we're talking about
3 children and grandparents and we're talking about
4 neighborhoods. And we're concerned about the
5 health of those neighborhoods and you can quote us
6 all your models that you want and all the
7 statistics that you want and we don't believe you.

8 What I would ask you to do and hereby
9 request is that the California Energy Commission,
10 Calpine Corporation and the City of Pittsburg
11 jointly fund a baseline study of the health of the
12 residents within an appropriate area of this
13 projects, I say within one mile, and update this
14 study every five years for the next 25 years to
15 assure residents that your joint activities near
16 our neighborhoods won't harm our health.

17 The County Public Health Officer would
18 be an appropriate impartial official to conduct
19 such a study. And there are other opinions on
20 the risk from powerplants, aside from those that
21 are expressed by Mr. Ringer.

22 So I would think it would be
23 appropriate, since the hour is late, perhaps if
24 there could be another workshop dealing primarily
25 with public health. There are some ancillary

1 developments that occurred because of the
2 California Energy Commission coming to Pittsburg
3 and they were done jointly with the City of
4 Pittsburg and Calpine is building these
5 facilities.

6 One is an industrial truck road and I
7 just got some pictures of it today. Here's a
8 church and the homes and the church is 12 feet
9 away from the curbline of an industrial truck
10 road. When you're talking about diesel exhaust
11 there would be about 1000 trucks coming here.

12 The City of Pittsburg used the Energy
13 Commission's assessment of this thing, which I
14 believe was done by Rita Frankle, which was
15 woefully inadequate, in my opinion.

16 The other picture I'd like to show you
17 is there's some purple pipes right there that you
18 might see. This is a greenbelt which was required
19 by your Energy Commission. Through that purple
20 pipe will come reclaimed sewage water from the
21 Delta Diablo Sanitation District. And that's
22 reclaimed sewage water -- this is A Street. There
23 are homes over there and we don't see it, but off
24 to the left there is a new subdivision called the
25 Village at New York Landing.

1 This use of reclaimed sewage water on
2 this greenbelt was justified by the City of
3 Pittsburg by referring to the Energy Commission's
4 approval. So this diesel road and this exhaust,
5 with its diesel exhaust and this purple pipe, it's
6 actually on your dime. The City of Pittsburg
7 honed in on our dime and said you justified it, so
8 they're justifying it without any study of the
9 health consequences.

10 And also on your dime a park is being
11 developed behind the wall, and I know there are
12 different opinions about this matter, but this is
13 a picture of a wall there, which your Energy
14 Commission acquired that wall. The City approved
15 this road, so they approved this road. This is a
16 park site which is on industrial land, undergoing
17 reclamation efforts by another state agency.

18 This is a park site. These are borings
19 of -- borings, which are very mysterious borings.
20 I don't know what they mean, but maybe Mike
21 Sommers knows why they have been done.

22 At any rate, I just want to leave this
23 with you and leave that request with you and ask
24 that the health aspects of this study be studied
25 further and that a further workshop will be held.

1 And that the County Public Health Officer, William
2 Walker, and other people be invited so that we can
3 get a broader view of the actual things that will
4 occur on the ground, rather than models or
5 extractions.

6 MR. RUBENSTEIN: Do you have specific
7 studies that you're referring to when you say that
8 there's other studies of powerplants?

9 MR. LENGYEL: Pardon?

10 MR. RUBENSTEIN: You refer to some
11 other --

12 MR. LENGYEL: No, it was something from
13 C.A.R.E., which I do not know of its validity or
14 not, but they hung it on my door one day and it
15 indicated some dangers from the noncriteria
16 pollutants or toxins from this powerplant.

17 So I think there is other material,
18 possibly, from this organization and there is --
19 the County Public Health Officer is also the City
20 Public Health Officer, so there are public health
21 laws that apply in this case. And somehow in all
22 your wonderful, you know, engineering and the need
23 for electricity, the human beings seem to get left
24 out and I would like to have them put back in the
25 picture with your assistance, in some way.

1 So, thank you very much.

2 MR. BERTACCHI: I would just like to
3 make one quick statement. The water being
4 produced that's in the purple pipe going down the
5 street is being produced by the Delta Diablo
6 Sanitation District. And it's being produced to
7 very stringent standards in California called
8 Title 22 standards.

9 That water also can be used for
10 swimming, that's how tightly controlled that water
11 is that's being produced. Thank you.

12 MR. RUBENSTEIN: Let me just reply to
13 that a little bit too.

14 When this project proposed used
15 reclaimed water, I got ahold of whatever studies I
16 could and put those in my analysis at the time.
17 Since then additional powerplants have proposed
18 used reclaimed water and I was able to get
19 additional studies, more updated studies that had
20 more information in them. And it turns out that
21 the reclaimed water is indeed, pretty clean water.
22 It's true that you can't drink it, but that's for
23 various reasons having to do more with perception
24 than anything, and I can say that because I'm not
25 part of that program. They could never say that,

1 I don't think.

2 There has been studies done in Los
3 Angeles on reclaimed water. There's several
4 treatment plants down there that produce water to
5 Title 22 standards. They looked at levels of
6 viruses and bacteria and I think they looked at
7 several hundred thousand gallons or liters of
8 water and didn't even find a single virus, a
9 viable virus.

10 There was also studies done on
11 irrigating food crops with this type of water.
12 And these were food crops that were meant to be
13 eaten raw down in the Monterey area. And as part
14 of that study they have sprinkler irrigation and
15 they also monitored the air and tried to determine
16 whether or not bacteria or any kind of pathogens
17 that might have been present in the water could
18 travel through the air, because that has to do
19 with, you know, inhalation.

20 People think that using this water,
21 pathogens might come out of the cooling tower and
22 that would affect people through inhalation.
23 Well, they found out there was no problem with
24 that either.

25 And this type of water recycling has

1 been endorsed by the Santa Clara County Medical
2 Society. So it is not something that we do
3 lightly, just go ahead and approve something
4 without looking at it.

5 And it's not only our opinion, I'm not
6 an expert per se in water like that. I depend on
7 the State Office of Drinking Water and they did
8 the proposed Title 22 standards.

9 When you talk about bringing in the
10 human part of this into the equation, anybody with
11 access to the Internet, and I encourage you to
12 look at the website at the Office of Environmental
13 Health Hazard Assessment. They're the group
14 that's composed of epidemiologists, physicians,
15 doctors, toxicologists, who are charged with
16 looking at all the different health studies out
17 there and coming up with the different levels that
18 are used in these health risk analyses. And in
19 each and every case they take a look at all these
20 studies that are out there, the people that were
21 involved in the studies, whether or not they were
22 healthy, whether or not they were sick.

23 If they were healthy they applied safety
24 factors. Sometimes the safety factors ran into
25 the hundreds or even thousands. In other words,

1 that there's a level that they find that there's
2 just a slight effect, they might divide that by a
3 thousand. And if they think what a safe level is,
4 with a margin of safety it's even further down.

5 This isn't something that we just do
6 lightly. These are the result of many hours of
7 public workshops and hearings and peer review and
8 these are eventually adopted into state standards
9 that people who do health risk assessments have to
10 use these levels.

11 MR. SOMMER: I'd like to add that our
12 use of the recycled water and the regulations
13 related to that are monitored by the Department of
14 Health Services and we have to make various
15 submittals of how we're going to use the water and
16 we have monitoring requirements, etcetera.

17 So, in addition to that, the California
18 Energy Commission and the Department of Health
19 Services also monitors our use of this recycled
20 water.

21 MR. BERTACCHI: I think it's also worth
22 noting too that those regulations have kind of two
23 levels of how that water is treated.

24 The first level is the type of water
25 that you would see used for, you know, watering

1 gardens and things like that, agricultural use.
2 This water that we're producing over at -- the
3 Delta Diablo Sanitation District is producing for
4 Calpine is of a higher standard. It's actually
5 certified, as I said earlier, for swimming, so
6 it's even to a much higher standard than what
7 you'd normally see to water the normal, perhaps,
8 on the roadside bushes.

9 MR. RUBENSTEIN: Well, not only that,
10 but it could be used for watering playground areas
11 where children can be, things like that, any kind
12 of public contact.

13 MS. GUNN: Hi, Joyce Gunn, 120 Herron
14 Drive in Pittsburg. And I've only lived in
15 Pittsburg a year, so I had a couple of real basic
16 suggestions for your information that you handed
17 out.

18 One is the only reason we knew about
19 this meeting is because we happened to see the
20 article in the newspaper. There was no other way
21 that we would have known about it.

22 Secondly, I would suggest that you mail
23 notices to the residents in the area that is in
24 proximity to the project that you're working on,
25 so that -- you know, you may or may not have time

1 to read your newspaper and you may not get on the
2 Internet, but if it's mailed to your house it's up
3 to you whether you look at it or throw it away
4 without looking at it. And at least then you're
5 covered as far as having notified everybody from
6 your end.

7 And the other thing is probably not
8 important to a lot of the people here, because
9 they've lived here a long time, but there is no
10 place in the handouts that actually shows the
11 address of this project or a map showing the
12 project and where it's located.

13 Now I'm sure there was in the original
14 application, but it seems like every bit of
15 information that comes out should at least have
16 the address of where the project is, if not a map
17 showing it. Thanks.

18 COMPLIANCE PROJECT MANAGE SCOTT: Thank
19 you.

20 Okay. In conclusion, I want to thank
21 all of you for coming out. You've all brought up
22 some very valid points and what has been said over
23 and over again, which many of you have brought up,
24 and it's something that we need to look at, is our
25 notification process, which we will do. Because

1 your input is important in our process and it's
2 one thing that we use in the process of putting
3 our mailing lists together and basically it's
4 worked.

5 But things are changing and the
6 Commission is willing to change. So we'll look at
7 that.

8 I can't give you a list of all the
9 things I'm going to do. That's the reason why I
10 have the reporter, because so much came up and
11 we'll look at the transcript. I think this
12 workshop indicates that we need to have another
13 one. I need to talk with my Program Manager to
14 see how we're going to proceed with this, whether
15 we have a final draft analysis sent and have a
16 workshop on that or if we'll look at this
17 transcript and get the additional information out
18 to you.

19 So right now I can't tell you exactly
20 what we will do, but we will schedule another
21 workshop.

22 COMPLIANCE PROGRAM MANAGER NAJARIAN:
23 Might I just interrupt for a second. My
24 inclination is to integrate the comments and the
25 staff analysis, publish it and have another

1 workshop. Is that something -- would you think
2 that that's the way to proceed, just generally?

3 FROM THE AUDIENCE: I would like to get
4 a published transcript. I'd like to see a
5 published transcript.

6 COMPLIANCE PROGRAM MANAGER NAJARIAN: A
7 public transcript is public knowledge.

8 FROM THE AUDIENCE: Yeah, but I mean
9 sometimes it takes eight weeks.

10 COMPLIANCE PROJECT MANAGER SCOTT: Oh,
11 no, no, that would take five to ten working days
12 for this transcript.

13 MS. LAGANA: On the Internet?

14 COMPLIANCE PROJECT MANAGER SCOTT: I
15 guess it could if we get an electronic copy, we
16 could put it on the Internet. We'll work
17 something out.

18 MR. SOMMER: Can I make one comment as
19 the Applicant. There was a significant number of
20 issues related to the Commission process and other
21 things that to me were not related to the specific
22 amendment requests and I would just like to have
23 that considered that I don't want our amendment
24 request to be adversely impacted schedulewise to
25 address Commission process issues and things that

1 are beyond the scope of our application.

2 COMPLIANCE PROJECT MANAGER SCOTT: Okay.
3 We would take that into consideration. That's why
4 I said we would look at the transcript before we
5 proceeded, but some of the questions dealt with
6 additional information --

7 MR. SOMMER: Agreed.

8 COMPLIANCE PROJECT MANAGER SCOTT: --
9 that the people wanted to see in the analysis.

10 MR. SOMMER: I agree with that. Okay,
11 thank you.

12 COMPLIANCE PROJECT MANAGER SCOTT: Okay,
13 with that, I'll give my card to anyone who doesn't
14 have it so you can contact me. I'll let you know
15 when the transcript is available and we'll let you
16 know -- we'll put together another workshop.

17 Okay, thank you again for coming.

18 (Thereupon the California
19 Energy Commission Workshop on
20 the Los Medanos Energy Center
21 Project was adjourned at 10:25
22 P.M.)
23
24
25

CERTIFICATE OF REPORTER

I, JAMES RAMOS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said Meeting, nor in any way interested in the outcome of said Workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of December, 2000.

JAMES RAMOS

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